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Business Analyst

Position Description

Conduct business process analyses, needs assessments, and preliminary cost/benefits analyses in an effort to align information technology solutions with business initiatives. Prepares functional, system and program specifications using CASE (Computer-Aided Software Engineering). Planning, organizing and conducting detailed management analytical studies to define problems, identify deficiencies and improve solutions which impact the enterprise's effectiveness, and provide the basis for management decisions. Assist the Information Center Manager in maintaining, upgrading and troubleshooting the business software implementation methodology, or Applications Manager or Systems and Programming Manager.

Essential Position Functions

Principal Duties & Responsibilities

1. Develops, edits and maintains operating procedures and standards manuals.
2. Serves as a consultant to the enterprise in work measurement, system studies or cost/effectiveness analysis.
3. Directs the activities of the Forms/Graphic Designer and departmental secretarial support in maintaining an effective user-support relationship.
4. Provides assistance as required to organizations outside of the enterprise to improve internal procedures that may be advantageous to the enterprise.
5. Approves all enterprise business forms required for the various operations within the enterprise.
6. Conducts training sessions to implement new or improved systems and procedures.
7. Conducts meetings on all levels of management for purposes of presentations, reviews, approvals of recommendations, etc.
8. Performs at or above the enterprise's Information Technology performance standard and specifically for procedure development and analysis.
9. Assumes additional responsibilities as assigned.
10. Recognizes and identifies potential areas where existing business services policies and procedures require change, or where new ones need to be developed, and make recommendations in these areas.
11. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Assist in hiring, discipline, transfer, promotion, increases, etc.
- Change schedules or working relationship.
- Structure priorities of function to be completed.
- Initiate policies and procedures.
- Monitor and analyze business services system performance.
- Develop and maintain of business services system problem analysis and resolution techniques.
- Analyze and resolve problems quickly and efficiently as they relate to business services.
- Support applications and operations with business management consultation relating to the business services area.
- Evaluate the hardware and software vendor and third party hardware and software and report significant findings regarding business services applications to the Information Center Manager.

Position Requirements

- BS or BA level degree in computer science, business administration, operations engineering or related field or equivalent years experience.
- 5 years of supervisor, administrative or systems procedures analysis experience, three in the business services area are required as well
- Experience in areas of operations engineering (i.e. work simplification, work measurement techniques/skill)
- Ability to express complex technical concepts effectively, both verbally and in writing
- Analytical and organizational skills
- Ability to work independently with limited supervision
- Knowledge of office automation, data processing techniques and practices, forms and records management
- Ability to work well with people from different disciplines with varying degrees of technical experience

Career Ladder

The career track for this position is continued technical leadership within technical support and IS.

Business Analyst

Business Systems Team Leader

Position Description

Directs the planning, implementation, and execution of business-specific technology plans. Ensures internal customers needs analysis is in alignment with business initiatives. Works with functional groups within IT and internal business clients to develop short and long term system plans. Assists in prioritizing the implementation of technology systems with internal and business needs.

Business Systems Team Leader

Chief Information Officer

Position Description

The Chief Information Officer (CIO) is accountable for directing the information and data integrity of the enterprise and its groups and for all Information Services functions of the enterprise, including: all data centers, technical service centers, production scheduling functions, help desk, communication networks (voice and data), the internet site, the intranet site, computer program development, and computer systems operations. He or she is responsible for maintaining the integrity of all electronic and optical books and records of the enterprise, including: review of computerized and manual systems; information processing equipment and software for acquisition, storage and retrieval; and definition of the strategic direction of all information processing and communication systems and operations. He or she provides overall management and definition of all computer and communication activities within the enterprise including responsibility for providing a leadership role in the day to day operations of the Information Services functions as well as providing direction as the enterprise grows through internal growth and external acquisition.

Essential Position Functions

Principal Duties & Responsibilities

1. Prepares enterprise objectives and budgets to facilitate the orderly and efficient capture, storage, processing and dissemination of information.
2. Interacts frequently with all SBU management on internal and external operations that are impacted by the capture, storage, processing and dissemination of information including review and approval of all major contracts for services and equipment in both the enterprise and SBUs Information Technology groups.
3. Prepares quarterly and annual reports on the operations of all Information Technology operations of the enterprise.
4. Develops and maintains statements of necessary policies and procedures to assure proper documentation and communication of necessary controls.
5. Develops and manages effective working relationships with other departments, groups and personnel with whom work must be coordinated or interfaced.
6. Assists in evaluating the staff of all Information Technology functions.
7. Participates as a member of the Systems Resource Board.
8. Maintains external links to other companies in the industry to gain competitive assessments and share information, where appropriate.
9. Identifies the emerging information technologies to be assimilated, integrated and introduced within the corporation, which will significantly impact the enterprise.
10. Assesses brand-new computing technologies to determine potential value for the enterprise.
11. Provides a source of specialized expertise that can serve the needs of other IT activities.
12. Establishes proactive organizational framework that supports both end-user computing and IT professional computing with proper balance to maximize benefits for the enterprise.
13. Manages a diverse group of information technology and strategic planning specialists.
14. Provides enterprise-wide direction on the use of emerging technologies for IT satellite operations, including other groups and subsidiaries.
15. Directs the administration and control of the IT Research and Development fund to gain the best possible return through innovative programs.
16. Identifies programs to measure benefits, particularly productivity-related, in order to insure value is being added consistent with enterprise productivity goals.

17. Interfaces with external industrial and academic organizations in order to maintain state-of-the-art knowledge in emerging technologies and to enhance the enterprise's image as a first-class corporation utilizing the latest thinking in this field.
18. Monitors procedures to insure that, for potential information technology projects of any size, a comparison is made of internal development versus purchase.
19. Monitors the inventory of installed or planned-to-be installed Information Technology.
20. Identifies and monitors the set of standards that establishes:
 - Mandatory telecommunications standards;
 - Standard languages for classes of acquired equipment;
 - Documentation procedures for different types of systems;
 - Enterprise data dictionary - with clear definitions for when elements must be included.
 - Identification of file maintenance standards and procedures; and
 - Examination procedure for systems developed as independent islands to insure that they do not conflict with enterprise needs and that any necessary interfaces are constructed.Identifies and provides appropriate information technology staff career paths throughout the organization. These include lateral transfers within and between departments, upward movements within IT (both in the enterprise and SBU IT functions) and appropriate outward movement to other functional units.

Authority

- Hiring - The CIO will hire/terminate direct reports, as well as approve staff reporting to the direct reports. Included in this responsibility is the discipline, promotion, salary adjustments, etc., of staff including providing guidelines for all Information Technology functions within the enterprise including the SBUs that may not directly report to this position.
- Budgetary - The CIO is responsible for oversight and review of staffing, projects and performance of all computer and communications functions of the organization.
- Contract Review - All contracts for computer and communication technology hardware, software and services will be subject to a review by the CIO.

Position Requirements

- BA or BS in Computer Science, Computer Information Systems, Management Information Systems, Business, or related field
- Graduate degree in Business with an emphasis in Computer Information Systems or Management Information Systems preferred.
- Minimum of six years of experience.
- Previous leadership, management and supervisory experience.
- Significant executive experience and knowledge of the enterprise business is required.
- Strong knowledge of contracting, negotiating, organization development/change management, financing, accounting, the political and legislative process, strategic planning, action planning and supervision.
- Demonstrate initiative, exercise good judgement, strong profit orientation, and an ability to achieve results through others.
- Very strong conceptual, analytical, judgement and strategic planning skills are critical.
- Excellent verbal and written communication skills.
- Excellent time management abilities.

Chief Information Officer

Client/Server Programmer/Analyst

Position Description

Develops, encodes, tests, debugs, documents, and installs programs to support client/server software systems. Prepares program specifications and diagrams, and develops coding logic flowcharts. Develops programs to support UNIX minicomputers or mainframes and microcomputer servers as well as applications that run on both systems and exchange data between systems with the inclusion of a relational database.

Essential Position Functions

Principal Duties & Responsibilities

1. Maintains and modifies existing applications programs.
2. Writes new programs of moderate complexity and scope, working with basic applications systems designs and specifications and utilizing standards procedures and techniques.
3. Assists higher-level programmers in the development of complex programs. Work assignments at this level are aimed more at production than at training. All work is subject to approval from higher levels.
4. Works on routine, well-defined, analysis-type problems related to a single activity or procedure and having some variety and or moderate difficulty.
5. Analyzes source and content of data.
6. Works on computer programs usually dealing with routine record-keeping types of operations.
7. Prepares programs requiring a wide variety and extensive number of internal processing actions.
8. Participates in certain aspects of user consulting, systems analysis, general systems design, vendor contracts and detail systems design.
9. Learns user functions, organization and role in the enterprise to the extent required.

Authority

- Develop analysis and design of systems and/or programs.
- Generate and test program code.
- Document program code.
- Assist others with debugging whenever necessary.

Position Requirements

- High School diploma or equivalent required
- BS or BA degree in computer science, business administration is preferred or equivalent related experience.
- 2 years experience in client/server programming
- Familiarity with the organization's existing client/server system is required
- Primary experience should be with client/server applications
- Ability to do debugging, data analysis and systems analysis
- Good written and oral communications skills

Career Ladder

Continued technical leadership within technical support and IS.

Client/Server Programmer/Analyst

Computer Magnetic Media Librarian

Position Description

Maintains a library of magnetic media used for information systems. Using established procedures and methods, classifies, catalogs and issues media to computer operators, and maintains a charge-out record. Inspects returned media to determine need for replacement due to wear or damage, and arranges for return of unusable media to the manufacturer for reconditioning.

Computer Operations Assistant Manager

Position Description

The main responsibilities of the Computer Operations Assistant Manager are to supervise the operation of the data center, maintain a high level of technical expertise, and a technical understanding of the software and production systems installed in the production and test environments. The assistant manager manages and supervises the physical operation of enterprise computers, related peripheral equipment, computer room personnel, and support systems.

Essential Position Functions

Principal Duties & Responsibilities

1. Oversees the processing of all computer systems in the production and/or test environments.
2. Insures proper utilization of CPU resources, channel I/O completion, peripheral devices and DASD requirements.
3. Supervises the application processing streams as they enter and exit any of the enterprise processors.
4. Performs quality control checks to insure an effective and productive data center.
5. Manages and directs all subordinates on the shift including operations analysts and computer operators.
6. Insures that published security procedures for both the physical area and the data belonging to the enterprise are enforced including insuring computer room access is limited to those authorized personnel with proper identification and/or card access.
7. Monitors and maintains all resource access requests for top-secret security authorizations during weekends and other off-shift periods.
8. Assists the computer operations manager in training, motivating, counseling, supervising and reviewing subordinates.
9. Recommends staffing changes and promotions for computer room personnel.
10. Assures that equipment is properly maintained and utilized.
11. Maintains a neat and clean operating environment.

Authority

- Reschedule jobs if required.
- Restart intended jobs following documented procedures.
- Control access to the enterprise's Information Technology center.
- Place service calls to vendors regarding repairs or for assistance.
- Make recommendations on hiring, firing, transferring, demoting and promoting.
- Take disciplinary actions whenever necessary, including personnel suspensions.

Position Requirements

- High school diploma or equivalent
- BS or BA in computer science or business is required
- 4 years of computer operations experience with 2 years in a senior or lead operator position
- Demonstrated skills in human relations and written and oral communications

Career Ladder

The Computer Operations Assistant Manager would logically progress into a managerial position within the computer operations. The most practical position to assume would be the Manager Production Services or Manager Computer Operations.

Computer Operations Assistant Manager

Computer Operations Supervisor

Position Description

The Computer Operations Supervisor manages shift operations and functions supporting centralized and distributed Information Technology, insures maximum utilization of personnel and equipment while meeting production schedules and requirements, and directs operational and support personnel. The supervisor reports to the Computer Operations Manager.

Essential Position Functions

Principal Duties & Responsibilities

1. Oversees the operation and maintenance of central-site computer and peripheral equipment.
2. Insures the completion of all assigned responsibilities on schedule.
3. Reschedules personnel and reallocates workload as needed.
4. Maintains effective utilization of Information Technology resources.
5. Oversees and participates in the diagnosis and resolution of hardware and production problems.
6. Establishes and maintains interface between operations and systems development functions to expedite resolution.
7. Notifies appropriate parties of problems and schedule deviations.
8. Monitors and analyzes trends in computer operations and prepares recommendations for operational improvements.
9. Authorizes vendor service calls to resolve hardware/software problems, insures satisfactory service, and monitors and evaluates vendor problems.
10. Maintains security during shift.
11. Monitors and controls facilities to insure proper physical environment for computer hardware.
12. Oversees and approves building/hardware maintenance and hardware installation during assigned shift.
13. Determines and implements appropriate course of action in emergencies.
14. Insures that adequate inventory and supplies are available.
15. Interfaces with operations staff, management, IT staff administrative services, client IT users, contractors and outside vendors and suppliers.
16. Analyzes equipment improvements to increase resource utilization.
17. Establishes related procedures for resource utilization analysis.
18. Develops and maintains the computer environment to insure users receive appropriate service for charges incurred.
19. Maintains records and statistics on Information Technology productivity, evaluates performance of operations functions, establishes and implements systems and procedures, and analyzes existing methods and develops alternatives to increase production efficiency.
20. Contacts vendor for contract bids on computer supplies and services, evaluates products/service levels, and follows-up with vendors to insure contract compliance and performance.
21. Prepares and monitors budgets.

22. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
23. Strives to learn the job functions of the position's immediate superior as well as peer level positions with whom the individual interacts. It is the responsibility of the individual to be prepared for temporary re-assignment and/or promotion due to extended illness, personal emergency or business necessity.
24. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
25. Develops and maintains service level agreements with the various user departments and enterprise business units.
26. Performs at or above the enterprise's Information Technology performance standards.

Authority

- Manage the direction and development of assigned staff.
- Requisition staff replacements and additions; Interview applicants; hire new employees.
- Orient staff to department and enterprise policies.
- Evaluate employee performance.
- Establish goals and objectives for employees performance appraisal.
- Recommend promotion, transfers, terminations, and salary actions.
- Determine staff training and development needs. Insure quality training.
- Provide career counseling and professional development support.

Position Requirements

- High School Diploma or equivalent required
- BS or BA in computer science or business is desired
- 3-5 years Information Technology operations with supervisory experience
- Supervisor responsibility of 5-20 employees
- Ability to work varying hours and shifts
- On-call 24 hours/day, 7 days/week

Career Ladder

This position could lead into more managerial positions within the enterprise such as; Project Manager in applications, Computer Operations Manager, or Production Support Manager.

ECS: 1740 Level Guide B

Computer Operations Supervisor

Position Description

Supervises employees who monitor and control computer equipment, select and load input and output and observe the operation of equipment and control panels for error lights, verification printouts, error messages and faulty output. Assists in the maintenance of operation records.

Computer Operations Supervisor

Computer Operator

Position Description

Operates and monitors computer and peripheral equipment, such as printers, tape and disk drives. Selects and loads input and output, observes operation of equipment, control panels, error lights, verification printouts, error messages and faulty output. Researches error messages and may manipulate console to re-sequence job steps after a job is interrupted.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages and maintains printers, disk drives and tape drives.
2. Insures that backups and restores are completed in a timely and efficient manner.
3. Insures strict adherence to all Information Technology policies and procedures.
4. Insures the timely and efficient processing of production requests through the computer systems.
5. Insures that the distribution of output media is completed in an efficient and timely manner.
6. Insures that off-site tape storage is maintained at the proper level and that backup media is properly labeled and rotated.
7. Maintains physical security of the computer room and the computer systems.
8. Maintains an adequate supply of forms and storage media.
9. Is able to run the operations in the absence of direct supervision for the shift.
10. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
11. Strives to learn the job functions of the position's immediate superior as well as peer level positions with which the individual interacts. It is the responsibility of the individual to be prepared for temporary re-assignment and/or promotion due to extended illness, personal emergency or business necessity.
12. Fulfills departmental requirements in terms of providing administrative notification during periods of illness, vacation, or education.
13. Develops and maintains service level agreements with the various user departments and enterprise business units.
14. Performs at or above the enterprise's Information Technology performance standards.

Authority

- Manage and insure the backup/restore process.
- Operate computer equipment.

Position Requirements

- High school diploma
- BS or BA degree in computer science, business administration or related work experience recommended
- 1 - 2 years Information Technology operations experience

Career Ladder

This position could lead into more senior operator positions within the data center such as Senior Computer Operator or Lead Computer Operator.

Computer Operator

Database Administrator

Position Description

Designs, installs, maintains and enhances both physical and logical databases for specific applications considering client needs, information security, and cost effectiveness. Assures compatibility and efficiency of database applications through ongoing system monitoring and evaluation. Develops standards and monitors procedures for updating the data dictionary. Provides technical expertise on the database management system to clients and IT personnel. Develops security requirements for all online applications.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages the data dictionary of the enterprise.
2. Sets standards and controls the necessary infrastructure process associated with the database(s) of the enterprise.
3. Assists in troubleshooting and technical system support for the database programming group including the monitoring and reporting of group activities.
4. Assists in the daily activities of the members of the database programming group.
5. Provides senior technical leadership to the database design teams, database programming group, IT, and the enterprise including being conversant with and cognizant of the future direction of systems, how that direction will impact the enterprise, and how future and current systems can be exploited for the benefit of the enterprise.
6. Serves as a source of documentation and standards to help direct the activities of IT as a whole.
7. Works closely with other IT groups to coordinate current and future plans and activities including coordination and technical assistance to facilitate specific development projects that involve the computing environment, the coordination of software upgrades and the installation of new products.
8. Provides weekly and monthly reports on system problems and their solutions, as well as assisting in forecasts of future utilization and equipment requirements.
9. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
10. Presents at local and nation user groups.
11. Publishes articles describing both the enterprise's activities and assessments of technology.
12. Participates with the hardware and software vendor and other vendors in the assessment of advanced transaction processing and database productions including beta and field test participation.
13. Performs at or above the enterprise's Information Technology performance standards.
14. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Assist in all of the activities of the database programming group including database design, data dictionary management, system management, system programming, and troubleshooting.
- Coordinate with the personnel of the database-programming group.

- Coordinate with the activities of the database programming group and with other IT and enterprise organizations where necessary.
- Provide technical leadership to IT and the enterprise, especially on issues relating to future Information Technology modernization and/or expansion.

Position Requirements

- Knowledge of overall computer operations procedures, operating systems and platforms
- Database management systems, languages, procedures and controls.
- Skill in the use of database management tools and processes.
- Ability to work independently on complex problems, making detailed analysis until the problem is identified and resolved.

ECS: 1690

Database Administrator

Data Communications Manager

Position Purpose

The Data Communications Manager is responsible for overseeing data communications. This group is responsible for data communications management and programming on telephone equipment and on the enterprise computer environment. Data communications management includes configuration, security, communications monitoring and reporting, development of specialized data communication programs, data communication charge back, capacity planning, and data equipment utilization. The data communications manager is responsible for coordinating data communications issues and protocols.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages and directs the voice communication and data communication groups including setting priorities, coordinating, and the reporting of group activities.
2. Manages the daily activities of the members of both the voice communication and data communication groups.
3. Provides senior technical leadership to IS and the enterprise including being conversant with the future direction of voice and data communications systems, how that direction will impact the enterprise, and how future and current systems can be exploited for the benefit of the enterprise. Serves as a source of documentation and standards to help direct the activities of IS as a whole.
4. Works closely with other internal and external groups to coordinate plans and activities including coordination to facilitate specific development projects that involve voice and/or data communications, the coordination of hardware and software upgrades and the installation of new voice and data communication products.
5. Provides weekly and monthly reports on voice and data communication system performance as well as forecasts of future voice and data communications utilization and equipment requirements.
6. Consults with and advises other departments within the enterprise in the use of voice and data communication equipment and serves as a focal point for user inquiries regarding voice and data communications use and capabilities.
7. Initiates and directs special projects as required to assess and implement voice and data communication innovations.
8. Serves as representative of the enterprise to outside voice and data communications associations; interacts with special interest groups and governmental agencies dealing with voice and data communication matters.
9. Performs capacity reviews and plans for voice and data communication equipment and functions, as well as analyzes vendor proposals, and maintains current knowledge of overall voice and data communication vendor capabilities.
10. Develops and reviews technical service level standards for voice and data communication equipment; monitoring and reporting levels on voice and data communication systems.
11. Serves as the IS representative on the internal enterprise facilities and move committees.
12. Manages voice and data communication in all enterprise facilities.
13. Presents at local and national user groups.
14. Publishes of articles describing both the enterprise's activities and assessments of technology.
15. Participates with the hardware and software vendor and other vendors in the assessment of advanced transaction processing and database productions.
16. Performs at or above the enterprise's Information System performance standards.

17. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Oversee the activities of both the voice and data communications groups including telecommunications management and programming.
- Manage the personnel of the voice and data communications groups.
- Coordinate the activities of the voice and data communications groups with other IS and enterprise organizations.
- Provide technical leadership to IS and the enterprise.

Position Requirements

- BS or BA degree in computer science, Communications, or related field
- 5 years of experience with voice and data communication hardware and software, preferably in the enterprise's telephone environments
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience

Career Ladder

This position could lead to management positions within applications, technical support, or operations. This position would naturally lead into management activities rather than continued emphasis on technical skills.

Data Communications Manager

Data Security Analyst

Position Description

Monitors, evaluates, and maintains systems and procedures to protect the data systems and databases from unauthorized users. Identifies potential threats and responds to reported security violations. Determines causes of security violations and recommends corrective actions to ensure data security. Researches, recommends, and implements changes to procedures and systems to enhance data systems security. Assists in communicating security procedures to users.

Essential Position Functions

Principal Accountabilities

1. Establishes, maintains, and monitors all log-on identifications and access rules, defining specific access to network, files and database management systems. The methodical generation of such a system shall consolidate disparate applications security systems under one methodology.
2. Recommends security software and its application to all storage device types and the access to them.
3. Establishes alternative security measures if needed to support disaster recovery efforts.
4. Recognizes and identifies potential areas where existing data security policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
5. Participates with vendors in the assessment of advanced data security systems.
6. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
7. Performs at or above the enterprise's Information Technology performance standards.

Authority

- Design and implement data security measures within the enterprise.
- Maintain and document data security measures within the enterprise.
- Recommend security software packages and/or upgrades.

Position Requirements

- High school diploma required
- BS or BA degree in computer science, business administration or related work experience
- 5 years experience within Information Technology, 2 years within data security
- Strong working knowledge of operating systems, job control languages (or other production control language), utilities and security environment software
- Programming and/or network experience desirable
- Good oral and written communications skills
- Service oriented and work easily with users and IT management

Career Ladder

The logical career progression for the Data Security Analyst would be to advance into the position of Data Security Administrator.

Data Security Analyst

Database Administrator

Position Description

Designs, installs, maintains and enhances both physical and logical databases for specific applications considering client needs, information security, and cost effectiveness. Assures compatibility and efficiency of database applications through ongoing system monitoring and evaluation. Develops standards and monitors procedures for updating the data dictionary. Provides technical expertise on the database management system to clients and IT personnel. Develops security requirements for all online applications. Develops, tests and implements stored procedures, triggers and joined data views using complex logic and procedural programming code.

Essential Position Functions

Principle Duties & Responsibilities

15. Manages the data dictionary of the enterprise.
16. Sets standards and controls the necessary infrastructure process associated with the database(s) of the enterprise.
17. Assists in troubleshooting and technical system support for the database programming group including the monitoring and reporting of group activities.
18. Assists in the daily activities of the members of the database programming group.
19. Provides senior technical leadership to the database design teams, database programming group, IT, and the enterprise including being conversant with and cognizant of the future direction of systems, how that direction will impact the enterprise, and how future and current systems can be exploited for the benefit of the enterprise.
20. Serves as a source of documentation and standards to help direct the activities of IT as a whole.
21. Works closely with other IT groups to coordinate current and future plans and activities including coordination and technical assistance to facilitate specific development projects that involve the computing environment, the coordination of software upgrades and the installation of new products.
22. Provides weekly and monthly reports on system problems and their solutions, as well as assisting in forecasts of future utilization and equipment requirements.
23. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
24. Presents at local and nation user groups.
25. Publishes articles describing both the enterprise's activities and assessments of technology.
26. Participates with the hardware and software vendor and other vendors in the assessment of advanced transaction processing and database productions including beta and field test participation.
27. Performs at or above the enterprise's Information Technology performance standards.
28. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Assist in all of the activities of the database programming group including database design, data dictionary management, system management, system programming, and troubleshooting.

- Coordinate with the personnel of the database-programming group.
- Coordinate with the activities of the database programming group and with other IT and enterprise organizations where necessary.
- Provide technical leadership to IT and the enterprise, especially on issues relating to future Information Technology modernization and/or expansion.

Position Requirements

Knowledge of overall computer operations procedures, operating systems and platforms; database management systems, languages, procedures and controls. Skill in the use of database management tools and processes. Ability to work independently on complex problems, making detailed analysis until the problem is identified and resolved. Ability to employ specific programming tools to construct complex procedural routines and processes.

Database Administrator

Database Analyst

Position Description

Evaluates and designs existing or proposed systems to structure and access databases. Analyzes database requirements of the user department, applications programming and operations. Submits recommendations for solutions that require definition of the physical structure and functional capabilities of databases and require data security and data backup/recovery specifications. Proposes detailed specifications and flowcharts and coordinates installation of revised or new systems.

Database Librarian

Position Description

Develops, enters, and maintains data dictionary information. Ensures data adheres to established standards and requirements prior to entering into dictionary. Creates and maintain a library of all data in dictionary for each processing system.

Database Librarian

Distributed Systems Programmer/Analyst

Position Description

Develops, encodes, tests, debugs, documents, and installs programs to support general business applications running on PCs. Prepares program specifications and diagrams, and develops coding logic flowcharts. Develops programs on Personal Computers in languages such as C++, Visual Basic or Delphi.

Essential Position Functions

Principal Duties & Responsibilities

1. Maintains and modifies existing applications programs.
2. Writes new programs of moderate complexity and scope, working with basic applications systems designs and specifications and utilizing standards procedures and techniques.
3. Assists higher-level programmers in the development of complex programs. Work assignments at this level are aimed more at production than at training. All work is subject to approval from higher levels.
4. Works on routine, well-defined, analysis-type problems related to a single activity or procedure and having some variety and or moderate difficulty.
5. Analyzes source and content of data.
6. Works on computer programs usually dealing with routine record-keeping types of operations.
7. Prepares programs requiring a wide variety and extensive number of internal processing actions.
8. Participates in certain aspects of user consulting, systems analysis, general systems design, vendor contracts and detail systems design.
9. Learns user functions, organization and role in the enterprise to the extent required.

Authority

- Develop analysis and design of systems and/or programs.
- Generate and test program code.
- Document program code.
- Assist others with debugging whenever necessary.

Position Requirements

- High School diploma required
- BS or BA degree in computer science, business administration or equivalent related experience
- 2 years programming experience
- Knowledge of and background with business applications
- Familiarity with PC application development language (C++, Visual Basic or Delphi) is required
- Ability to do programming debugging, data analysis and system analysis
- Good written and oral communication skills

Career Ladder

Continued technical leadership within technical support and IS.

Distributed Systems Programmer/Analyst

Enterprise Web Site Manager

Position Description

Manages the enterprises Web Sites including technical programming and database development, design (site content, aesthetic look and feel) as well as the site's day-to-day operations. Must manage the activities of one or more web site dedicated jobs such as Web Developer, Web Author, Web Administrator and/or Webmaster.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages the installation, configuration and maintenance of Internet and Intranet servers to ensure proper transmission of documents and files over current protocols.
2. Defines and manages the setting of standards for the enterprise. May need to evaluate competing hardware and software to make determination of needs within the enterprise.
3. Defines and sets network security layers ("firewalls") so as to deter unauthorized access to proprietary data.
4. Manages the implementation and operation of all Internet and Intranet security with password and digital encryption information for secured documents.
5. Manages public/private key certificates for secure HTTP transactions.
6. Researches and implements security policies.
7. Ensures the definition of the look and feel of the enterprise sites is consistent with the enterprise.
8. Specifies standards for enterprise-wide (intranet) Web documents, ensures that all submitted documents meet those standards, and converts all other submitted materials to Web documents.
9. Manages the enterprises data exchange and integrates multimedia assets and database applications.
10. Coordinates overall site design implementation with creative staff, to match desired outcome with technological feasibility.
11. Generates timely reports as required.
12. Secures web site design , programming, graphics word-processing and authoring support as needed.
13. Manages the programming of Internet and Intranet applications in all common Web HTML formatting tools such as animated GIF and Java. This includes Web page-to-data access routines using Common Gateway Interface. Coordinates scripting and programming with other IT and web authors.
14. Integrates new technologies (add-ins and plug-ins) into the Internet and Intranet environment.
15. Maintains cross-platform and cross-browser compatibility.
16. Identifies necessary training and education requirements.
17. Researches new Web features and tools which might be useful for authoring documents, for managing the Web site, and for expanding on-line offerings. Usually has background in Computer Science or similar experience.
18. Mediates between the business needs, content authors and system administrator, ensuring adherence to applicable Web language coding standards and currency of Web links.
19. Optimizes Web architecture for navigability by taking editorial ownership of the content, quality and style of the site. Consults with graphic artists as required.
20. Provides first level help desk support on Web issues.

21. Defines the standards for a consistent visual image through uniform fonts, formatting, icons, images and layout techniques.
22. Defines appropriate resolutions, sizes, color maps and depths to ensure that images are delivered at sufficiently high speed and quality for intended output media.
23. See that all personnel are trained in use and applications associated with the Intranet, Web pages, uploading of data; file transfer; image acquisition using optical scanners and imaging tools.
24. Approves all final submissions for visual congruity and proper coding in common Web language.

Authority

- Depending on the maturity of the position (see Position Purpose above), a Manager Internet - Intranet Activities should have the authority to direct overall content of the Web site, at least in matters of style, wording and overall look and feel. The Manager Internet - Intranet Activities is a direct report to a member of senior management; he or she will often "inherit" certain measures of authority from that manager in all ways excepting the setting of policy.

Position Requirements

- High school diploma required
- BS or BA degree in computer science, graphic design or related work experience desirable
- Ability to work within a variety of Web-based hardware environments, and to manage the Web site from a client as well as a server perspective
- Ability to produce Web pages that are aesthetically pleasing within the limitations of the delivery medium
- Experience with server platforms and Web server software, networking, and security architecture and implementation
- Familiarity with standard Internet protocols and other Internet issues such as name servers, hypertext transfer, file transfer, e-mail, Usenet, etc.
- Familiarity with common Web languages and extensions as required, e.g. tables, frames, server-push/client-pull, server-side includes, etc., as well as awareness of browser compatibility issues
- Familiarity with both Internet and Intranet connectivity protocols and software
- Working knowledge of graphics applications allowing full manipulation of files
- Experience with database design and implementation utilizing databases
- Familiarity with Internet connectivity hardware (modems, data service units/channel service units, routers, terminal servers)
- Experience with Web Server-to-email interfaces
- Should be familiar with Common Gateway Interface and Java language programming, as well as animated GIF creation
- Ability to program forms and implement scripts
- Ability to interact positively and effectively with employees at all levels within the organization, as well as with customers, prospects, and vendors
- Demonstrate project management skills
- Excellent oral and writing skills

Fourth GL Specialist

Position Description

Responsibility for assisting in the installation, modification and ongoing support of the 4th generation language environments. Includes supporting the personal computer and office automation environments in order to maintain environmental continuity. Maintain, upgrade and troubleshoot the 4th GL software environment.

Essential Position Functions

Principal Duties & Responsibilities

1. Participates in the development of programming standards that will be utilized in the 4th GL and environments.
2. Troubleshoots and resolves hardware and software malfunction for variety of centralized and decentralized processing operations.
3. Assists clients with the definition of technical solutions in order to solve computer business issues.
4. Provides ongoing 4th GL technical support and training to all enterprise clients and personnel.
5. Maintains knowledge of new personal computer hardware and software technological advances and recommend improvements when appropriate.
6. Assists the Senior 4th GL Specialist in the technical evaluation of new Information Center products or services.
7. Provides ad hoc reporting and development support as needed.
8. Performs at or above the enterprise's Information Technology performance standards.

Authority

- Assist the Senior 4th GL Specialist in all aspects of 4th GL software usage including installation and upgrades.
- Assist in monitoring and reporting 4th GL software performance and reporting "bugs" to application developers and focus vendors.
- Assist in the development and maintenance of 4th GL application problem analysis and resolution techniques.
- Analyze and resolve problems quickly and efficiently
- Support applications and operations with technical consultation and specialized programming in the area of 4th GL applications.
- Coordinate with and assists in the activities of applications developers and project managers using any 4th GL.
- Evaluate 4th GL software and reporting significant findings to the information center manager.

Position Requirements

- BS or BA degree in computer science, business administration or equivalent related experience
- 2 years programming experience with 4th GL's
- Knowledge of and background with business applications
- Strong written and verbal communication skills
- Experience in the hardware and software vendor processing environments

Career Ladder

Continued technical leadership within technical support and IS.

Fourth GL Specialist

Forms and Graphics Designer

Position Description

Responsible for assisting the business systems analyst in business services forms and graphics management and development in the enterprise's computing environment including the development of specialized forms and graphics relating to the business services area. Assist in maintaining, upgrading and creating forms and graphics for the business services area.

Essential Position Functions

Principal Duties & Responsibilities

1. Uses both electronic and manual form tools to develop and forms and graphics, including both paper and screen form graphic design.
2. Develops forms and graphics for daily operational support.
3. Supports of applications activities that require specialized forms and/or graphics design.
4. Recognizes and identifies potential areas where existing forms and graphics policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
5. Works with all IT professionals and provides assistance in design and development of electronic and paper forms and reports.
6. Performs at or above the enterprise's Information Technology performance standards.
7. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Leadership role in the look and feel of all graphics associated with the enterprise in both paper and electronic format.
- Design all aspects of business services forms and graphics, including paper and screen design.
- Develop and maintain business services forms and graphics.
- Redesign forms and/or graphics quickly and efficiently where necessary.
- Consult and design specialized forms and graphics supporting applications and operations.
- Evaluate the hardware and software vendor and third party forms/graphics design software and reporting significant findings to the Business Services Analyst.

Position Requirements

- High School diploma required
- BS or BA degree in computer science, business administration, graphics design or equivalent related experience
- 3 years of design experience
- 2 years in forms and graphics design
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from different disciplines with varying degrees of technical experience

Career Ladder

Continued technical leadership within technical support and IS.

Forms and Graphics Designer

General Programmer/Analyst

Position Description

Analyzes and evaluates existing or proposed systems, and revises computer programs, systems and related procedures to process data. Prepares charts and diagrams to assist in problem analysis, and submits recommendations for solution. Prepares program specifications and diagrams, and develops coding logic flowcharts. Encodes, tests, debugs, and installs the operating programs and procedures in coordination with computer operations and user departments.

Essential Position Functions

Principal Duties & Responsibilities

1. Maintains and modifies existing applications programs.
2. Writes new programs of moderate complexity and scope, working with basic applications systems designs and specifications and utilizing standards procedures and techniques.
3. Assists higher-level programmers in the development of complex programs. Work assignments at this level are aimed more at production than at training. All work is subject to approval from higher levels.
4. Works on routine, well defined, analysis-type problems related to a single activity or procedure and having some variety and or moderate difficulty.
5. Analyzes source and content of data.
6. Works on computer programs usually dealing with routine record-keeping types of operations.
7. Prepares programs requiring a wide variety and extensive number of internal processing actions.
8. Participates in certain aspects of user consulting, systems analysis, general systems design, vendor contracts and detail systems design.
9. Learns user functions, organization and role in the enterprise to the extent required.

Authority

- Develop analysis and design of systems and/or programs.
- Generate and test program code.
- Document program code.
- Assist others with debugging whenever necessary.

Position Requirements

- High school diploma or equivalent required is required
- BS or BA degree in computer science, business administration or related field is preferred
- 1-2 years experience in programming using the basic programming language of the installation
- Familiarity with existing operating system is required
- Primary experience should be with large scale data storage systems such as tape/disk oriented systems
- Ability to do programming debugging, data analysis and system analysis
- Good written and oral communication skills

Career Ladder

Continued technical leadership within technical support and IS.

General Programmer/Analyst

Geographical Information Systems Programmer/Analyst

Position Description

Responsible for designing, developing and customizing GIS applications that support the business needs of the organization. Work with automated mapping and spatial information processing methods and techniques; understand cartographic design and drafting principles. Create new and edit existing graphical and tabular data; complete geographical analysis to create complex queries and spatial overlays; implement new data designs as provided by senior staff. Interface directly with clients to determine their needs and make recommendations.

Essential Position Functions

Principal Duties & Responsibilities

1. Develop and maintain the organizations GIS applications.
2. Determine requirements, appropriate software and design methodologies for GIS applications.
3. Design, develop, maintain and implement applications to develop and maintain enterprise spatial data, related data, and metadata.
4. Assist with administration of GIS data sales, marketing, training coordination, and related duties.
5. Document systems, programs and operational procedures.
6. Provide user documentation to clients.
7. Assist in the management and administration of the GIS data warehouse; including system monitoring, user interface improvements, verification of data integrity and data distribution.
8. Assists higher-level GIS programmers in the development of complex programs. Work assignments at this level are aimed more at production than at training. All work is subject to approval from higher levels.
9. Analyzes source and content of data.
10. Participates in certain aspects of client user consulting, systems analysis, general systems design, vendor contracts and detail systems design.
11. Learns client functions, organization and role in the enterprise to the extent required.

Authority

- Create and edit data sets, create complex queries/spatial overlays.
- Generate complex cartographic compositions.
- Interface directly with clients to determine needs and make recommendations
- Create user interfaces and other functional programming
- Document work completed.
- Assist others whenever necessary.

Position Requirements

- Associate BS or BA degree in computer science, geography, planning or related field is required
- BS or BA degree in computer science, geography, planning or related field is preferred
- 2 experience working with automated mapping, GIS, and geo-based applications development.
- Familiarity with the enterprise's GIS system is required
- Ability to work in a team environment.

- Good written and oral communication skills

Career Ladder

Continued technical leadership within technical support and IS.

Geographical Information Systems Programmer/Analyst

Groupware Administrator

Position Description

Manages account database for groupware systems (email, scheduling, and personal productivity packages). Troubleshoots groupware problems at the server and client level, repairing minor problems and forwarding major problems to the LAN Manager and other appropriate IT managers and administrators. Provides training and technical assistance to users.

Essential Position Functions

Principal Duties and Responsibilities

- Troubleshoot and resolve groupware-related software problems with little or no supervision.
- Work with helpdesk and trouble call software to prioritize and manage support calls.
- Manage priorities with respect to support calls and scheduled installations of software to ensure their timely completion.
- Maintain high level of communication with customers with respect to scheduling software installations and support calls.
- Recognize and forward hardware-specific problems to Hardware Technician and/or Support Specialist.
- Manage groupware accounts including additions, deletions, and connectivity issues.
- Manage groupware server disk space and monitor other server resources.
- Ensure proper security is implemented with respect to user accounts.
- Handle special requests such as mass mailings, special attachments, etc.
- Work with PC/LAN Support staff in troubleshooting problems and coordinating installations of groupware products.
- Work with outside agencies regarding connectivity and delivery issues with email and other provided services.

Authority

- Directs the activities of the technicians.
- Schedule and prioritize groupware activities
- Resolve problems with groupware systems.
- Identify potential service level problems before they occur and implement solutions.
- Develop and document groupware-related policies and procedures, including security.
- Work with clients, other groupware administrators within the enterprise and with external vendors.

Position Requirements

- High school diploma or equivalent is required
- Associate degree or 2 years at a technical school required
- BS or BA degree in computer science, business administration, or related field is preferred
- 2 – 3 years as a network or groupware analyst
- 3 – 5 years experience with wide and local area networks
- Ability to communicate effectively and to deal with external vendors
- Strong written and verbal communication skills

Career Ladder

The career track for this position is PC/LAN Administrator to LAN Manager or continual technical leadership within the technical service organization.

Groupware Administrator

Information Center Manager

Position Description

The Information Center Manager is responsible for the efficient and effective operation of the information center within the enterprise. The position involves planning, coordinating and supervising a smaller installation's information center. The supervisor reports to a senior business manager or director.

Essential Position Functions

Principal Duties & Responsibilities

1. Defines the information center charter, containing the information center mission statements, its goals, directions and the key strategies utilized in attaining those achievements.
2. Directs the activities of information center personnel in establishing and maintaining an effective client-support relationship.
3. Insures that all client requests and problems are being appropriately and adequately resolved in a timely basis.
4. Addresses personal computer issues including standardization, purchasing, evaluations, systems configurations, training and networking.
5. Assists where necessary in the development of microcomputer based systems.
6. Coordinates "ad hoc" reporting capabilities including training, usage policy, usage procedure, and a system to track information available in all reports.
7. Develops in-house training seminars to improve overall Information Technology awareness throughout the enterprise computer environments.
8. Establishes a records management policy, its subsequent program, and direct all efforts in following the established procedures.
9. Establishes and maintains an information resource library to include software, systems documentation, periodicals, records and report management systems.
10. Markets information center services through such means as the establishment of a monthly newsletter or the development of various user groups.

Authority

- Direct and/or perform the selection, acquisition, and installation of personal computers and departmental computers.
- Direct and/or perform the customization and technical support of enterprise wide LAN and PC based.
- Assign personnel to projects and direct their activities; review and evaluate their work.
- Confer with and advise subordinates on administrative policies and procedures, technical problems, priorities and methods; maintain appropriate administrative records.
- Interview and make recommendations on the selection of prospective employees.
- Prepare formal evaluation reports on employee performance, and makes recommendations regarding annual salary increases to the Technical Services Director.

Position Requirements

- BS or BA degree in computer science, business administration or related field required
- Experience in supervisory/management capacity

- Experience in an information center environment
- 1 year teaching experience at a minimum high school level is referred,
- Extensive experience with personal computers
- Excellent verbal and written communication skills

Career Ladder

This position could lead to management positions within applications, technical support, or operations. This position would naturally lead into management activities rather than continued emphasis on technical skills.

Information Center Manager

INFORMATION SYSTEMS (IS) AUDITOR

Position Description

Under the direction of the IS Audit Manager, or IS Senior Auditor, the IS Auditor performs professional audits of automated systems and computer operations throughout the County to ensure that adequate controls are in place and that resources are used efficiently and effectively.

Essential Position Functions

Principal Duties & Responsibilities

1. Assists with preliminary survey and risk assessment during planning phase of audit to help develop audit program.
2. Interviews County management and staff to obtain an understanding of the functions and activities of the area or system to be audited.
3. Prepares flowcharts to document business processes or systems to be reviewed.
4. Performs fieldwork and appropriate testing procedures using audit software where appropriate.
5. Analyzes and interprets audit results.
6. Prepares work papers and drafts written audit findings and recommendations to assist in preparation of the final audit report.
7. Attends audit opening and closing conferences with County management.
8. Participates as an audit representative/consultant on new system development projects.
9. Provides technical support to non-IS auditors.
10. Performs other related duties as assigned.

Position Requirements

- Bachelor's Degree in Business Administration, Computer Science, Accounting, or related field.
- Two to four years experience in an information systems audit environment.
- Knowledge of generally accepted accounting principles and IS auditing standards.
- An understanding of management principles and the ability to recognize and evaluate deviations from good business practice.
- Basic knowledge of programming and querying tools (i.e.: TSO/ISPF, JCL, COBOL, SQL, ACL or other data base software); systems analysis and design methodology; data file structures and access methods.

- Ability to work effectively and efficiently as a team member and perform all related tasks as assigned.
- Strong written and verbal communication skills.
- High level of proficiency in PC hardware and commonly-used software packages.

Certificates

Professional Certification as an Information Systems Auditor (CISA) desired; Masters degree or other certification may substitute for certification.

Career Ladder

This position can lead to an IS Senior Auditor position.

INFORMATION SYSTEMS (IS) AUDIT MANAGER

Position Description

Under the direction of the County Auditor, the IS Audit Manager identifies and evaluates the County's investment in information technologies and the associated risk. The IS Audit Manager establishes and implements the IS section of the County's annual audit plan and performs professional administrative work related to supervising the Internal Audit Department.

Essential Position Functions

Principal Duties & Responsibilities

1. Develops relationships with senior management personnel enabling the audit manager to discuss and understand dynamic aspects of the business and technology environments.
2. Assists the County Auditor in assigning, scheduling, and budgeting audits.
3. Plans, prioritizes, and conducts reviews of business applications, data center operations, and new systems under development.
4. Supervises and coordinates the activities of staff members and consultants.
5. Directs, consults and instructs audit staff in developing the nature and scope of assigned audits.
6. Reviews and approves audit programs, work papers and all written reports.
7. Evaluates personnel performance and participates in personnel decisions.
8. Plans, assigns, and supervises special studies.
9. Organizes and develops departmental procedures, policies, and practices.
10. Organizes staff development and training.
11. Attends meetings, conferences, and public forums to stay informed of current technologies and to maintain certification in information systems auditing.
12. Provides technical audit assistance to non-IS auditors.
13. Utilizes audit software for testing accuracy and validity of data.
14. Responsible for reporting findings and recommendations both verbally and in writing.
15. Provides assistance, counsel, and recommendations to management regarding opportunities to increase organizational value through strengthening internal controls, streamlining processes, enhancing operating effectiveness, improving quality of results, reducing waste or loss, and furthering overall progress towards achievement of key business objectives.

Position Requirements

- Bachelor's Degree in Business Administration, Computer Science, Accounting, or related field.
- Six to eight years of progressively responsible experience in IS Audit with a minimum of two years supervisory/management experience.
- Advanced IS auditing practices, theory and methodology.
- Intermediate knowledge/skill level of programming and querying tools (i.e.: TSO/ISPF, JCL, COBOL, SQL, ACL or other data base software); systems analysis and design methodology; data file structures; and file access methods.
- Knowledge of generally accepted accounting principles and IS auditing standards.
- IS auditing experience in local government and knowledge of government auditing standards preferable.
- Demonstrated strong report writing skills and superior verbal communication skills.
- High level of proficiency in PC hardware and commonly-used software packages.

Certificates

Professional Certification as a Certified Information Systems Auditor (CISA) required.

Career Ladder

This position can lead to a senior information technology management position, or an information technology consultant position or to the County Auditor position.

INFORMATION SYSTEMS (IS) AUDIT MANAGER

Information Technology (IT) Director

Position Description

The Information Technology Director manages, at the direction of the Chief Information Officer or the Executive Business Leader, the overall information systems function of the organization. He or she plans, directs, and controls the development, installation and maintenance of computer programs, including the systems and programming procedures, computer equipment operations, enterprise technical service centers, production scheduling functions, and help desk operations. Coordinates the integration of office operations and information systems. Develops and establishes department standards and procedures. Evaluates studies of the economics of possible alternative methods of processing.

Essential Position Functions

Principal Duties & Responsibilities

1. Supervises and monitors the performance of production functions to insure the accurate and timely completion of Information Technology production work.
2. Provides management and direction for the application-programming group including setting priorities, coordinating, and the reporting of group activities.
3. Manages the daily activities of the members of the application-programming group.
4. Provides senior technical leadership to IT and the enterprise including being conversant with the future direction of systems, how that direction will impact the enterprise, and how future and current systems can be exploited for the benefit of the enterprise.
5. Serves as a source of documentation and standards to help direct the activities of IT as a whole.
6. Works closely with other groups to coordinate plans and activities including coordination to facilitate specific development projects that involve the mainframe, the coordination of software upgrades and the installation of new products.
7. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
8. Oversees the economical and effective utilization of production facilities and resources including personnel and equipment.
9. Coordinates and oversees the activities of the organization's middle managers to insure that all activities within those areas are performed in a competent and efficient manner.
10. Estimates resource requirements and the cost of maintaining production services to insure both flexibility and machine capacity to meet normal production requirements.
11. Assumes extensive responsibility for projecting and planning future hardware, software and personnel needs.
12. Informs management of recurring or projected resource and capacity problems and initiates and coordinates planning and/or corrective action.
13. Reviews, approves and directs the design and implementation of production procedures and performs planning and scheduling of operations resources.
14. Evaluates the performance of production resources and reports the results to management. Implements change where required to improve production performance.
15. Plans and directs the hiring, training and development of organization's management personnel. Appraises manager-level subordinates and controls promotions and salary reviews for Information Technology department employees.

16. Prepares budgets and related financial documents for the organization.
17. Approves procedural and security standards for Information Technology functions to protect the security of the installation, the data processed by the department and its personnel, Information Technology programs, and the computer equipment that performs the necessary processing.
18. Insures the maintenance of a clean, healthy, and efficient working environment for all Information Technology personnel.
19. Approves programs to educate management and users in Information Technology equipment capabilities and data entry requirements.
20. Works with management to coordinate and improve Information Technology services.
21. Assists in the development of and approves a contingency plan to insure system backup and recovery capability for the Information Technology area.
22. Oversees and insures efficient and effective usage of supplies, materials and services for the Information Technology area.
23. Serves as the senior disaster recovery director under disaster recovery circumstances.

Authority

- Prepare the short and long-range Information Technology department expense budget.
- Prepare the short and long-range Information Technology department capital budget.
- Prepare and recommend department personnel wage increases and promotions.
- Interview new hires and make final recommendations to the appropriate hiring personnel.

Position Requirements

- BS or BA degree in computer science or related field required Graduate degree in computer science (MS) or Business (MBA) is highly desirable
- 5 years of programming experience, three in systems design are required as well (includes experience in multiple languages and platforms)
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience.

Career Ladder:

The logical career progression for the Information Technology Director would be to become the Chief Administrative Officer. Lateral movement in the non-technical director level is also a possibility.

Information Technology (IT) Director

Information Technology (IT) Help Desk Coordinator

Position Description

Applies understanding and knowledge of information technology products and services to assist internal users on complex matters. Responsible for recognizing, researching, isolating and resolving information systems problems. Coordinates referrals to appropriate technical, professional or service personnel for appropriate services, repairs, training, and follow-up. May provide information technology library support.

Essential Position Functions

Principal Duties & Responsibilities

1. Responds to user requests for information and assists in problem resolution.
2. Maintains contact with users on operational and production problems.
3. Checks quality and distributes reports requested by users for on-site and remote users.
4. Assists in coordinating the resolution of applications/software systems problems impacting production.
5. Assists systems and programming personnel, as requested.
6. Assists in resolving technical computer operations equipment problems.
7. Log documents and maintains history records on Information Technology production problems.
8. Initiates corrective action or carries out instructions to resolve system problems on production jobs.
9. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
10. Strives to learn the job functions of the position's immediate superior as well as peer level positions with which the individual interacts. It is the responsibility of the individual to be prepared for temporary re-assignment and/or promotion due to extended illness, personal emergency or business necessity.
11. Fulfills departmental requirements in terms of providing administrative notification during periods of illness, vacation, or education.
12. Develops and maintains service level agreements with the various user departments and enterprise business units.
13. Performs at or above the enterprise's Information Technology performance standards.

Authority

- Handle a variety of operations/production problems requiring judgment within generally defined policies and procedures.
- Perform quality checks and distributes reports.

Position Requirements

- High school diploma required
- BS or BA degree in computer science, business administration or related work experience recommended
- Ability to work varying shifts
- 1 - 2 years experience in a customer service related field, desktop and applications support printer and workstation hardware and software support.
- Knowledge of all enterprise hardware and software in use within the enterprise
- Excellent written and verbal communications skills.
- Ability to operate computer peripheral equipment.
- Team player with ability to work with end user community.

Career Ladder

This position could lead to a lead coordinator position within the enterprise, most probably Help Desk Supervisor.

Information Technology (IT) Help Desk Coordinator

Information Technology (IT) Librarian
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Position Description

Performs duties relating to maintaining data processing tape inventory to meet department and user needs. Complies with the disaster recovery plan. Maintains the library of technical references and ensures reference manuals are kept up-to-date. Repairs, cleans and replaces tapes as necessary.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages the systems that provide the primary inventory of all removable media for the IT function.
2. Mounts, dismounts and monitors magnetic tape and silo unit operations for the data center.
3. Maintains a system of labeling magnetic tape, which facilitates quick and efficient identification and retrieval.
4. Maintains a system of storing magnetic tape, which insures back-up data protection for disaster recovery procedures. The stored tape must also be able to be identified and secured quickly and efficiently if needed for reloading.
5. Performs simple periodic maintenance on magnetic tape units, such as cleaning the read/write heads, with appropriate procedures.
6. Reports any malfunctioning magnetic tape unit to the shift supervisor and files appropriate trouble management system (TMS) reports.
7. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
8. Strives to learn the job functions of the position's immediate superior as well as peer level positions with whom the individual interacts. It is the responsibility of the individual to be prepared for temporary re-assignment and/or promotion due to extended illness, personal emergency or business necessity.
9. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
10. Develops and maintains service level agreements with the various user departments and enterprise business units.
11. Performs at or above the enterprise's Information Technology performance standards.

Authority

- Make decisions regarding the purchase of magnetic tape media.

Position Requirements

- High school diploma required
- Experience with magnetic tape units, preferably in a hardware environment similar to the enterprise
- Work towards a BS or BA degree in computer science or related technical field preferred, or a corresponding number of years' experience in IT.

Information Technology (IT) Librarian

Information Technology (IT) Consultant

Position Description

Researches and analyzes future technology trends, blending them with current IS capabilities and information needs, to provide the foundation for the development of strategic directions for IS. Participates in senior management task forces to study and prioritize specific business issues or new technologies and incorporate them with the strategic technology plan. Develops IS strategies on key technologies and makes recommendations to County management regarding the adoption a technology framework and plan. Actively develops the policies, procedures and methodologies to make the strategic plan a reality. Develops standards and guidelines necessary to ensure consistency in the implementation of the strategic plan. Identifies opportunities to re-engineer business practices to maximize the benefits of the IS plan. Acts as liaison with strategic vendors capable of supplying the technical infrastructure to meet the business solutions, including development of requests for information on emerging technologies. Serves as a key County resource in information technology planning with high technologies. Serves as a key County resource in information technology planning with a high level of contacts throughout the industry. Functions as technical advisor to critical projects.

Essential Position Functions

Principal Duties & Responsibilities

1. Provides support to SBUs and external groups in the use of enterprise systems.
2. Provides consulting support to enterprise customers (both internal and external) to maximize revenue and margin for the enterprise.
3. Develops long range information architecture and strategy.
4. Supports growth of firm, both internally generated and externally created or acquired.
5. Reviews the status of all major development projects which are undertaken by any IT function within the enterprise or as requested by the Systems Resource Board.
6. Prepares computer applications objectives and budgets to facilitate the orderly and efficient capture, storage, processing and dissemination of information.
7. Interacts frequently with all SBU management on internal and external operations that are impacted by the capture, storage, processing and dissemination of information including review and application approval of all major contracts for services and equipment in both the enterprise and SBUs Information Technology groups.
8. Prepares quarterly and annual application architecture reports on the operations of all Information Technology's operations of the enterprise.
9. Identifies statements of necessary policies and procedures to assure proper documentation and communication of necessary controls.
10. Develops and manages effective working relationships with other departments, groups and personnel with whom work must be coordinated or interfaced.
11. Assists in evaluating the staff of enterprise and SBU Information Technology's functions.
12. Identifies the emerging applications technologies to be introduced within the corporation which could significantly impact enterprise.
13. Assesses brand-new applications of computer and communication technology to determine potential value for the enterprise. Provides a source of specialized expertise that can serve the needs of other IT activities.
14. Defines proactive organizational framework that supports both end-user computing and IT professional computing with proper balance to maximize benefits for the enterprise.
15. Identifies programs to measure benefits, particularly productivity-related, in order to insure value is being added consistent with enterprise productivity goals.

16. Interfaces with external industrial and academic organizations in order to maintain state-of-the-art knowledge in emerging technologies and to enhance the enterprise's image as a first-class corporation utilizing the latest thinking in this field.
17. Monitors procedures to insure that, for potential information technology projects of any size, a comparison is made of internal development versus purchase.
18. Monitors the inventory of installed or planned-to-be installed technology.
19. Monitors the set of standards that establishes:
 - Standard languages for classes of acquired equipment;
 - Documentation procedures for different types of systems; and
 - Examination procedure for systems developed as independent islands to insure that they do not conflict with enterprise needs and that any necessary interfaces are constructed.

Position Requirements

- BA or BS Degree in computer information systems, computer science, business or public administration
- Graduate Degree in business with emphasis in Computer Information Systems, Management Information Systems, or Masters in Public Administration preferred
- In-depth and broad range knowledge of IT and disciplines, such as networks, distributed computing, application development, client/server architecture, methodology, and software engineering.
- Broad knowledge of business functions, operations, and applications.
- Skills in conducting detailed research on emerging technologies through reading and contact with industry experts.
- Project management experience
- Ability to develop and communicate to the client community a strategic vision of information management for the future which capitalizes on the available technologies.
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience

Career Ladder

This position could lead to senior management positions within applications, technical support, or operations. This position would naturally lead into management activities rather than continued emphasis on technical skills.

Information Technology (IT) Consultant

Local Area Network (LAN) Administrator

Position Description

Maintains file servers to ensure maximum efficiency and reliability of production LAN environment. Provides training and technical assistance to users. Identifies and resolves hardware, software and operator problems, makes repairs, or refers to service personnel. Has ability to troubleshoot and diagnose severity of LAN problems and make repairs with little or no assistance. Refers major LAN problems and other issues to LAN Manager and other appropriate IT Management personnel. Does research and testing of new products including hardware, business software, and operating systems.

Essential Position Functions

Principal Duties and Responsibilities

- Troubleshoot and resolve server hardware problems with little or no supervision.
- Troubleshoot and resolve server software problems with little or no supervision.
- Work with helpdesk and trouble call software to prioritize and manage support calls.
- Manage priorities with respect to support calls and scheduled installations of hardware and software to ensure their timely completion.
- Maintain high level of communication with customers with respect to scheduling hardware and software installations and support calls.
- Distribute appropriate support calls and installations to Hardware and Software Technicians.
- Troubleshoot and distinguish between common types of LAN connectivity problems, and resolve them with little or no supervision.
- Distinguish between major and minor LAN problems, resolving them with little or no supervision. Work with LAN Manager to resolve major LAN problems.
- Work with Telecommunications Technicians and other outside agencies to ensure reliable and efficient connectivity and operability of PCs, printers, modems, and other equipment.
- Manage LAN accounts including additions, deletions, moves, and changes.
- Install and configure server based and regular software packages onto network servers to facilitate deployment to clients.
- Manage disk space and monitor other network resources.

Authority

- Resolve problems with network systems (hardware and software).
- Identify potential service level problems before they occur and implement solutions.
- Develop and document LAN network -related policies and procedures, including security.

Position Requirements

- High school diploma or equivalent is required
- Associate degree or 2 years at a technical school required
- BS or BA degree in computer science, business administration, or related field is preferred
- 2 – 4 years experience with wide and local area networks
- Ability to communicate effectively and to deal with external vendors
- Strong written and verbal communication skills

Preferred Certifications

- MCSE or CNE

Career Ladder

The career track for this position is LAN Manager or a continual technical leadership within the operations, technical services and user organizations.

Local Area Network (LAN) Administrator

Local Area Network (LAN) Administration Supervisor

Position Description

Supervises Local Area Network (LAN) administration personnel who evaluate, implement, provide training and support network software, such as electronic mail, calendar/scheduling, micro to mainframe gateways, etc. Ensures the availability of telecommunications network infrastructure, systems and services to authorized LAN users and supervises the development of timely and effective training programs to meet their needs.

LAN Administration Supervisor

Local Area Network (LAN) Applications Support Analyst

Position Descriptions

Assists with office automation configuring and maintaining the enterprise LAN environment. This includes implementation, configuration, coordination, control, maintenance, troubleshooting, security, usage monitoring and the development of specialized procedures relating to the use of the LAN environment within the enterprise. Responsible for the evaluation, selection and training of new products or services, comprehensive systems analysis and progressive support methodologies for all LAN applications.

Essential Position Functions

Principal Duties & Responsibilities

1. Assists in system generation and tuning, system configuration, upgrades, system performance, system disaster recovery, tuning and usage reporting.
2. Develops tools and procedures for daily operational support of LAN users.
3. Supports development activities that require specialized system programming relating to the LAN environment.
4. Performs LAN management services including creation/modification of user profiles and account management.
5. Administers and monitors the procedures used to create, modify and manage client accounts.
6. Maintains the LAN systems filing cabinets and associated system utilities to optimize operating efficiency.
7. Analyzes training needs of office automation clients, develops classroom curriculum and provides quality individual and group training programs designed to insure maximum utilization of equipment.
8. Maintains the integrity of the LAN processing environment, and insures continuity with the current processing applications.
9. Analyzes client requirements and recommends appropriate hardware and software solutions to optimize work flow and efficiency.
10. Recognizes and identifies potential areas where existing office automation system policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
11. Establishes and maintains a positive working relationship with all enterprise departments to optimize working relationships and communication.
12. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.
13. Performs at or above enterprise's Information Technology performance standards.

Authority

- Assist in all aspects of office automation system generation including fine-tuning, maintenance and upgrades.
- Monitor and report office automation system performance and usage.
- Develop and maintain office automation system problem analysis and resolution techniques.
- Analyze and resolve office automation system problems quickly and efficiently.
- Support applications and operations with technical consultation and specialized programming relating to the office automation system.

- Evaluate hardware and third party office automation software and reporting significant findings to the relating to office automation.
- Adhere to all established enterprise, division and departmental policies, standards and procedures.

Position Requirements

- BS or BA degree in computer science or business administration or equivalent work related experience
- 3 years of programming experience, two in PC, office automation system, and LAN system management experience
- Experience in basic and advanced work processing functions in a LAN environment
- 2 years supervisory experience
- 2 years experience in a training environment
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from different disciplines with varying degrees of technical experience

Career Ladder

The career track for this position is continued technical leadership within the Information Center, technical supports and IS.

Local Area Network (LAN) Applications Support Analyst

Local Area Network (LAN) Manager

Position Description

Manages the installation, maintenance, and monitoring of the organization's Local Area Network (LAN) systems. Evaluates vendor products in hardware, software, and LAN technologies. Develops LAN policies and standards and insures adherence to security procedures. The LAN Manager must be familiar with LAN topology and network file servers, bridges, hubs, gateways and routers. The LAN Manager will be responsible for a complex state-of-the-art network that will be rapidly changing to support enterprise growth and development of new business opportunities. The LAN manager is challenged with providing an environment that is reliable, flexible, and cost-effective.

Essential Position Functions

Principal Duties and Responsibilities

- Provide input to management for network design, procurement of network equipment and supplies.
- Monitor and tunes the enterprise network for optimal performance.
- Acts as the primary interface with equipment vendors for resolving problems and hardware issues.
- Provide planning and technical support for enterprise design and installations.
- Recognize and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
- Participate with vendors in the assessment of new hardware solutions including beta and field test participation.
- Perform at or above the enterprise's Information Technology performance standard.
- Fulfill departmental requirements in terms of providing work coverage and administrative notification during system outages and large projects.
- Troubleshoot and resolve file server hardware problems with little or no supervision.
- Works with helpdesk and trouble call software to prioritize and manage support calls.
- Report major LAN-related problems to other LAN managers and other appropriate IT management.
- Install and configure server based and regular software packages onto network servers to facilitate deployment to clients.
- Manage disk space and monitor other network resources.

Authority

- Direct the activities of the PC/LAN Technicians. The technicians will be responsible for the day to day repair, monitoring and installation of the network.
- Schedule and prioritize network upgrades and outages.
- Evaluate vendors for LAN equipment and hardware/software standards.
- Design the enterprise network and integrate it with other enterprise activities.
- Develop and document network related policies and procedures including network security.
- Participate in telecommunication related task force whenever necessary.
- Resolve problems with network systems (hardware and software).
- Design the network(s) and integrate those plans with other organization activities.

- Identify potential service level problems before they occur and implement solutions.
- Develop and document LAN network -related policies and procedures, including security.
- Work with clients, other LAN network administrators within the enterprise and with external vendors.

Position Requirements

- High school diploma or equivalent is required
- Associate degree or 2 years at a technical school required
- BS or BA degree in computer science, business administration, or related field is preferred
- 3 – 5 years experience with wide and local area networks
- Ability to communicate effectively and to deal with external vendors
- Strong written and verbal communication skills

Preferred Certifications

- MSCE or CNE

Career Ladder

The career track for this position is Manager, Network Services

Mainframe Programmer/Analyst

Position Description

Develops, encodes, tests, debugs, documents, and installs programs for large-scale or high volume transactions requiring IBM/MVS or similar mainframe processing. Prepares program specifications and diagrams, and develops coding logic flowcharts. Develops programs in languages such as COBOL and CICS, or fourth-generation business-oriented languages.

Essential Position Functions

Principal Duties & Responsibilities

1. Maintains and modifies existing applications programs.
2. Writes new programs of moderate complexity and scope, working with basic applications systems designs and specifications and utilizing standards procedures and techniques.
3. Assists higher-level programmers in the development of complex programs. Work assignments at this level are aimed more at production than at training. All work is subject to approval from higher levels.
4. Works on routine, well-defined, analysis-type problems related to a single activity or procedure and having some variety and or moderate difficulty.
5. Analyzes source and content of data.
6. Works on computer programs usually dealing with routine record-keeping types of operations.
7. Prepares programs requiring a wide variety and extensive number of internal processing actions.
8. Participates in certain aspects of user consulting, systems analysis, general systems design, vendor contracts and detail systems design.
9. Learns user functions, organization and role in the enterprise to the extent required.

Authority

- Develop analysis and design of systems and/or programs.
- Generate and test program code.
- Document program code.
- Assist others with debugging whenever necessary.

Position Requirements

- High school diploma or equivalent required
- BS or BA degree in computer science, business administration or related field is preferred
- 1–2 years experience in programming using the basic programming language of the installation
- Familiarity with existing mainframe systems is required
- Primary experience should be with large scale data storage systems
- Ability to do programming, debugging, data analysis and system analysis
- Good written and oral communication skills

Career Ladder

Continued technical leadership within technical support and IS.

Mainframe Programmer/Analyst

Manager, Applications

Position Description

The Applications Manager is responsible for establishing standards and techniques for improving the applications development processes and monitoring to insure compliance. The responsibilities include designing and revising the application development process to best meet internal and external customer requirements and maximizing the productivity of the application staff and the maintainability of software systems. Specific duties include: planning, directing and overseeing the development, installation and maintenance of computer programs for business and/or scientific applications; developing and establishing department standards and procedures; and assigning, directing and coordinating the work of the programming staff, providing technical support and direction. The manager must keep abreast of new technologies, incorporate those technologies when appropriate, and motivate others to utilize them.

Essential Position Functions

Principal Duties & Responsibilities

1. Directs the development of the components of information systems, while providing functional guidance and direction to client base.
2. Coordinates a close relationship with the client to assist in developing standard components of an information system.
3. Establishes standards to which the application developers must adhere, thereby providing an enterprise wide set of standards and development processes.
4. Facilitates the development of application systems which are designed to provide information in a timely and efficient manner at the lowest possible cost to IT and the customer.
5. Evaluates and recommends state-of-the-art development tools for use within the applications development environments to achieve the most efficient mix of system design and software development tools to produce maximum cost effective utilization of IT resources.
6. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
7. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel absence.
8. Performs at or above the enterprise's Information Technology evaluation standards.
9. Trains, supervises, assigns projects to, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.
10. Participate with vendors in the assessment of advanced operating systems and database production systems including beta and field test participation.

Authority

- Identify potential service level problems before they occur and implement or communicate solutions.
- Review workload and analyze staffing requirements, make recommendations regarding employment, promotions, salary adjustment, and termination. Perform employee counseling and evaluate work performance.
- Enforce departmental operating procedures, applicable security procedures and support/practice needs to insure that the quality of service provided meets customer requirements.

- Participate in the development and implementation of processes that improve efficiency and enhance productivity.

Position Requirements

- BS or BA degree in computer science, mathematics, engineering, business, information systems or a related field.
- Graduate degree in computer science is highly desirable
- 4 years experience in applications development methodologies, with 2 years as a Software Engineer
- Knowledge at the expert level of current techniques and hardware capabilities of a large scale computing environment
- Supervisory experience and ability to plan and control projects
- Ability to understand, and clearly relate to other members of the organization, technical manuals, software specifications, hardware principals of operations, and general methods of applications software development methodologies and techniques
- Ability to communicate effectively in dealing with internal and external customers and suppliers

Career Ladder

The successful Applications Manager could move into an IT Director position. This position would naturally lead into senior management activities rather than continued emphasis on technical skills.

Manager, Computer Operations

Position Description

The Computer Operations Manager is responsible for overseeing computer operations. Specific duties include: planning, directing and controlling the activities of computer operations exclusive of the systems and programming function; developing and establishing department standards and procedures, and assigning work to the operations staff. Prepares activity and progress reports. In addition, this manager is responsible for data processing system management and data processing system programming. Data processing system management includes configuration, security, database monitoring and reporting, and the development of specialized programs. He or she coordinates database issues with other IS organizations including applications development and enterprise operations. The manager also coordinates computer operations issues and enterprise communications issues. The manager must be well versed in relational database technology, data processing procedures, telecommunications, and computer operations.

Essential Position Functions

Principal Duties & Responsibilities

1. The Computer Operations Manager is responsible for the daily activities of the members of the computer operations and computer operations groups, including operations analysts.
2. Provides senior technical leadership to IT including being conversant with the future direction of current Information Technology how that direction will impact the enterprise, and how future and current systems can be exploited for the benefit of the enterprise. Given the high level of technical leadership provided by the manager, the Computer Operations Manager also serves as a source of documentation and standards to help direct the activities of IT as a whole.
3. Works closely with other groups to coordinate plans and activities including coordination to facilitate specific development projects that involve databases as well as the coordination of software upgrades and the installation of new database products.
4. Provides weekly and monthly reports on Information Technology performance as well as forecasts of future database utilization requirements.
5. Serves as representative of the enterprise to outside Information Technology associations; interacts with special interest groups and governmental agencies dealing with Information Technology matters.
6. Performs capacity reviews and planning for database equipment and functions, as well as analyzes vendor proposals and maintaining current knowledge of overall Information Technology vendor capabilities.
7. Develops and reviews technical service level standards for database equipment; monitoring and reporting activity levels on Information Technology systems.
8. Assists in the disaster recovery plan in place on the enterprise databases.
9. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
10. Presents at local and national user groups regarding transaction processing at the enterprise.
11. Publishes articles describing both the enterprise's activities and assessments of technology.
12. Participate with vendors in the assessment of advanced transaction processing and database productions including beta and field test participation.
13. Performs at or above the enterprise's Information Technology performance standards.
14. Trains, supervises, assigns projects to, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.

15. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Oversee the activities of the computer operations and systems programming groups including management, troubleshooting and work accomplishment.
- Manage the personnel of the computer operations, and systems programming groups.
- Coordinate the activities of the Information Technology, computer operations, and enterprise communications groups with other IT and the enterprise departments.
- Provide technical leadership to IT and the enterprise.

Position Requirements

- BS or BA degree in computer science, information systems, business management or related field.
- MS in computer science or business MBA is highly desirable
- 5 years of programming experience, 3 years system programming experience
- Experience with relational technology, telecommunications transaction processing and advanced tools for database modeling and design is required
- Knowledge of mainframe and database systems is highly recommended
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience

Career Ladder

This position could lead to management or director positions within IS. This position would naturally lead into senior management activities rather than continued emphasis on technical skills.

Manager, Computer Operations

Manager, Enterprise Architecture

Position Purpose

The Manager Enterprise Architecture is responsible for the management of the architecture activities directed towards the development and maintenance of information systems and process of architectural models, with primary emphasis on optimizing and integrating the flow of information and physical products throughout the division as well as with external subcontractors and customers.

Essential Position Functions

Principal Duties & Responsibilities

1. Develops and implements plans to translate enterprise information system objectives into functional business systems.
2. Coordinates, develops and maintains the enterprise methodologies and techniques, including standards and guidelines for enterprise wide use in technical studies and systems development processes.
3. Coordinates all systems development activities to insure the elimination of duplication of effort, conformance to the enterprise plan and the ultimate attainment of enterprise and enterprise business goals and objectives.
4. Directs, motivates, delegates and empowers staff in the successful performance of their tasks and responsibilities while encouraging innovation.
5. Participates in the analysis, evaluation and development of enterprise long range strategic plans and operating plans to insure that the enterprise architecture objectives are consistent with long term business objectives.
6. Identifies implementation risks; analyzes potential impact to enterprise and scheduled objectives; develops, submits and maintains enterprise critical path schedules; and initiates action to correct any deviations from this schedule.
7. Facilitates process re-engineering conferences to develop annual process change recommendations and maintains and updates process re-engineering methodology.
8. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
9. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
10. Performs all responsibilities within the guidelines of enterprise policies and directives at or above the enterprise's performance and evaluation standards.
11. Trains, supervises, assigns projects to, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.

Authority

- Direct all enterprise architecture staff.
- Schedule and prioritize work to accommodate IT and customer needs while minimizing impact on current projects.
- Develop and implement methodologies and techniques that improve efficiency and enhance productivity relating to technical studies and the systems development process.

- Provide technical leadership in the enterprise architecture strategies, processes and methodologies.
- Identify potential problems before they occur and implement solutions.
- Review workload and staffing requirements, make recommendations regarding employment, promotions, salary adjustments, and termination. Perform employee counseling and work performance evaluations.

Position Requirements

- BS or BA degree in computer science or related field required
- MS in computer science or business MBA is preferred
- 15 years experience in data processing (applications, systems programming, PC/LAN, networking and/or communications) with 5 years in a management role desired
- Significant experience in systems architecture and strategic technology planning in large organizations.
- Knowledge at the expert level of current techniques and hardware capabilities of a large scale database and data communications environment
- Ability to plan and control projects
- Ability to understand and clearly relate to other members of the organization, technical manuals, software specifications, hardware principals of operations, and general methods of systems software operations

Manager, Enterprise Architecture

Manager, Help Desk

Position Description

The Help Desk Manager is responsible for managing all activities related to Help Desk services and procedures. Responsibilities include: recognizing identifying, isolating and resolving problems with information system products and services; ensuring that problems are identified and resolved in a timely manner; interacting with appropriate, technical, professional or service personnel, as appropriate, to resolve continuing problems and to ensure the function is current on the technology being used. The manager will develop and implement customer services strategies and technologies which optimize the cost effectiveness and reliability of IS resources.

Essential Position Functions

Principal Duties & Responsibilities

1. Develops, coordinates, and/or directs the implementation of standardized Help Desk (HD) strategies and processes.
2. Establishes problem tracking and change verification processes that insure a proactive and cost effective modification to IT production environments; monitors these environments to enforce related policies and procedures.
3. Provides proactive communication with customer community and provides technical advisory services as required.
4. Directs the HD to insure service levels are adhered to, by meeting and exceeding first and second level problem resolution, and utilizing network management tools to detect and diagnose problems.
5. Directs, motivates, delegates and empowers staff in the successful performance of their tasks and responsibilities while also encouraging innovation.
6. Develops the operating and long-range plans annually which reflect forecasts of service levels, expenditures, and resources for all environments.
7. Maintains liaison with key customer representatives from all groups at all levels.
8. Supports IT and department goals as required for the planning and implementation of strategies which guarantee customer satisfaction, system availability, service levels, and support of the performance criteria.
9. Insures adequate shift hours by scheduling vacation, holidays and overtime. Covers or calls in staff when shortage situation arises.
10. Monitors the processing of jobs, prioritizing the critical path jobs in order to meet service level requirements. Oversees, monitors and verifies the output of the work unit.
11. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel absence.
12. Performs all responsibilities within the guidelines of enterprise policies and directives at or above the enterprise's performance and evaluation standards.
13. Trains, supervises, assigns projects to, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.

Authority

- Identify potential service level problems before they occur and implement solutions.
- Direct self and the activity of others during proactive problem determination, evaluation, and resolution.
- Schedule and prioritize work to accommodate IT and customer needs while minimizing impact on current projects.
- Recommend methods, policies and procedures to eliminate problem reoccurrence or insure potential problems do not occur.
- Lead and/or contribute to projects/committees that establish guidelines, set procedures, outline standards, and monitor for industry compliance.
- Contribute to the training and development of personnel in direct support of IT delivery of services.
- Work with all departments to make sure that the level of customer service provided meets or exceeds expectations.

Position Requirements

- BS or BA degree in computer science related field preferred; or a corresponding number of years experience in data processing
- 3 – 5 years experience in a customer support supervisor position, preferable in a large scale, highly technical environment
- Knowledge at the expert level of current techniques and hardware capabilities of a large scale database and data communications environment
- Supervisory experience and ability to plan and control projects
- Excellent communication and interpersonal skills are required for dealing with internal and external customers and suppliers

Career Ladder

The Help Desk Manager could move laterally into applications, technical support, operations, or large project management positions in the IS organization. Depending on prior technical experience, promotions may also be available in other groups within the enterprise. A broad range of experience, exposure, and visibility could lead in many directions.

Manager, Help Desk

Manager, Microcomputer Technology

Position Description

The Microcomputer Technology Manager is responsible for the overall coordination, control and maintenance of personal computers (PC's) within the enterprise to insure compatibility and integration with enterprise strategies. He or she plans, organizes and implements support functions to meet end-user requirements. He or she may coordinate the training for end-users on hardware and related software applications. He or she directs, reviews, and evaluates the microcomputer technology function to insure that planning and budgeting activity position the enterprise to take full advantage of applicable advancements, meet customer demand and service levels with limited resources in a rapidly changing environment.

Essential Position Functions

Principal Duties & Responsibilities

1. Identifies and initiates resolutions to user problems and concerns associated with personal computer equipment, hardware and software to the user's satisfaction.
2. Plans and coordinates the purchase, installation and implementation of personal computer hardware and software according to department standards and procedures.
3. Analyzes the training needs of personal computer users, develops classroom curriculum and provides quality individual and group training programs designed to insure maximum utilization of PC equipment.
4. Maintains PC software and hardware registration and inventory to provide upgrades as necessary and insure appropriate security levels are maintained.
5. Upholds the enterprise policy guidelines as well as recommends new and improved guidelines to insure compatibility and better service for PC users.
6. Maintains current technical expertise in the rapidly changing technology of microcomputers and utilizes state-of-the-art techniques when implementing personal computing solutions.
7. Prepares monthly status reports quantitatively reporting results of personal computer activities.
8. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
9. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
10. Performs at or above the enterprise's Information Technology evaluation standards.
11. Trains, supervises, assigns projects to, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.

Authority

- Resolve problems with client PC hardware and software.
- Plan and coordinate PC hardware and software purchase and implementation.
- Develop PC training programs and curriculum commensurate with needs.
- Work with PC users within the enterprise and with external microcomputer vendors.
- Identify potential service level problems before they occur and implement solutions.

- Direct self and the activity of others during the testing, monitoring and installation of the network software as required.
- Schedule and prioritize work to accommodate enterprise and customer needs while minimizing impact on current projects.
- Contribute to the training and development of IT personnel in direct support of IT delivery of services.

Position Requirements

- BS or BA degree in computer science related field preferred; or a corresponding number of years experience in data processing
- 4 years personal computer experience with 2 years as a supervisor within a personal computing environment
- Knowledge at the expert level of current techniques and hardware capabilities of personal computers, local area networks, wide area networks, and connectivity capabilities with mainframe computers
- Supervisory experience and ability to plan and control projects
- Ability to understand, and clearly relate to other members of the organization, technical manuals, software specifications, hardware principals of operations, and general methods of systems software operations.

Career Ladder

Depending on technical experience, this position may have the opportunity to move into the Director Technical Services.

Manager, Microcomputer Technology

Manager Network Services

Position Purpose

The Manager Network Services manages and supervises the operation of the voice and data communications networks and local on-line network. The areas of responsibility are network planning and management, local and remote network hardware installations, the operation of the network service desk, and data center security administration.

Essential Position Functions

Principal Duties & Responsibilities

- Insures the efficient and trouble free operation of all data communications equipment, remote and local communications controllers, remote and local terminal devices and remote printers.
- Develops, recommends and implements operational techniques and methodologies which insure full use of machines and personnel.
- Hires, trains, counsels, supervises and appraises subordinates to insure an efficient and effective operation.
- Prepares and administers performance evaluations and recommends salary adjustments for salaried subordinates.
- Coordinates all network-monitoring activities for communications, such as order entry and e-mail.
- Communicates relevant network control activities with IT management and non-IT management who are affected by the performance of the voice and data communications network.
- Insures that all network equipment is maintained in proper working order.
- Maintains network equipment inventories and network documentation.
- Insures that all network software are operating and maintained.
- Defines the strategy for linkage of Internet and other non-enterprise exclusive "Information Highway" networks to the enterprise's network.

Authority

- Recommend new voice and data network technology.
- Oversee the installation of network hardware and software.
- Interview and recommend personnel for hiring, firing, transfer, demotion or promotion.
- Prepare purchase orders for Director approval.
- Monitor purchases through tracking invoices.

Position Requirements

- BS or BA in computer science or communications
- Graduate degree in computer science or telecommunications is highly desirable
- 6 years of voice and data communications experience, with 2 years as a network supervisor
- Demonstrated skills in human relations
- Strong oral and written communications skills

Career Ladder

The Manager Network Services could move laterally within the managerial positions in the Information Technology. A possible upward advancement would be into the position of director of telecommunications services.

Manager Network Services

Manager Personal Computing and Office Automation Support

Position Purpose

The Manager Personal Computing and Office Automation Support is responsible for the overall coordination, control and maintenance of personal computers within the enterprise to insure compatibility and integration with enterprise strategies.

Essential Position Functions

Principal Duties & Responsibilities

1. Identifies and initiates resolutions to user problems and concerns associated with personal computer equipment, hardware and software to the user's satisfaction.
2. Plans and coordinates the purchase, installation and implementation of personal computer hardware and software according to department standards and procedures.
3. Analyzes the training needs of personal computer users, develops classroom curriculum and provides quality individual and group training programs designed to insure maximum utilization of PC equipment.
4. Maintains PC software and hardware registration and inventory to provide upgrades as necessary and insure appropriate security levels are maintained.
5. Upholds the enterprise policy guidelines as well as recommends new and improved guidelines to insure compatibility and better service for PC users.
6. Maintains current technical expertise in the rapidly changing technology of microcomputers and utilizes state-of-the-art techniques when implementing personal computing solutions.
7. Prepares monthly status reports quantitatively reporting results of personal computer activities.
8. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
9. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
10. Performs at or above the enterprise's Information Technology evaluation standards.
11. Trains, supervises, assigns projects to, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.

Authority

- Resolve problems with client PC hardware and software.
- Plan and coordinate PC hardware and software purchase and implementation.
- Develop PC training programs and curriculum commensurate with needs.
- Work with PC users within the enterprise and with external microcomputer vendors.
- Identify potential service level problems before they occur and implements solutions.
- Direct self and the activity of others during the testing, monitoring and installation of the network software as required.
- Schedule and prioritize work to accommodate enterprise and customer needs while minimizing impact on current projects.
- Contribute to the training and development of IT personnel in direct support of IT delivery of services.

Position Requirements

- High school diploma or equivalent
- BS or BA degree in computer science or related field preferred or a corresponding number of years experience in IT.
- 4 years experience in personal computing, with 2 years as a supervisor within a personal computing environment
- Knowledge at the expert level of current techniques and hardware capabilities of personal computers, local area networks, wide area networks, and connectivity capabilities with mainframe computers
- Supervisory experience and ability to plan and control projects
- Ability to understand, and clearly relate to other members of the organization, technical manuals, software specifications, hardware principals of operations, and general methods of systems software operations

Career Ladder

Depending on technical experience, the Manager Personal Computing and Office Automation Support may have the opportunity to move into the Director Technical Services position.

Manager Personal Computing and Office Automation Support

Manager, Systems and Programming

Position Description

The Manager Systems and Programming is responsible for overseeing the systems analysis and computer programming functions of the organization. System management includes configuration, security, resource monitoring and reporting, and the development of specialized programs. Programming includes coordinating software issues with other IS organizations, working with other operating systems where necessary and working with connectivity with other computer systems. Specific duties include: developing and establishing department standards and procedures; directing and coordinating efforts to maintain and upgrade current systems; directing the systems analysis, procedure development and programming efforts in the study, design and implementation of new systems, and in the evaluation, acquisition and installation of new equipment.

Essential Position Functions

Principal Duties & Responsibilities

1. Assists the director in the management and direction setting for the enterprise's application programming group including setting priorities, coordinating, and the reporting of group activities. The Manager Systems and Programming is responsible for the daily activities of the members of the enterprise application-programming group.
2. Provides senior technical leadership to IT and the enterprise including being conversant with the future direction of enterprise systems, how that direction will impact the enterprise, and how future and current systems can be exploited for the benefit of the enterprise. Given the high level of technical leadership provided by the manager of systems, the manager will also serve as a source of documentation and standards to help direct the activities of IT as a whole.
3. Works closely with other groups to coordinate plans and activities including coordination to facilitate specific development projects that involve the enterprise systems, the coordination of software upgrades and the installation of new product.
4. Provides weekly and monthly reports on project status as well as forecasts of utilization.
5. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
6. Participate with vendors in the assessment of advanced operating systems and database production systems including beta and field test participation.
7. Performs at or above the enterprise's Information Technology performance standard.
8. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.
9. Trains, supervises, assigns projects, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.

Authority

- Oversee the activities of the enterprise application-programming group including system management and application programming.

- Manage the personnel of the enterprise application-programming group.
- Coordinate the activities of the group with IT and other departments.
- Provide technical leadership to IT and the enterprise.

Position Requirements

- BS or BA degree in computer science, information systems or a related field.
- Graduate degree is highly desirable
- 5 years of programming experience
- 3 years system programming experience
- Experience with enterprise system internals
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience

Career Ladder

This position could lead to director positions within IS. This position would naturally lead into management activities rather than continued emphasis on technical skills.

Manager, Systems and Programming

Manager, Telephone and Radio Services

The Manager Telephone and Radio Services is responsible for managing the acquisition, distribution, installation, relocation, repair, maintenance, accountability and control of all telephones, radios and alarms at all groups and for providing effective and efficient support which meets or exceeds customer expectations and requirements.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages the telephone and radio services group activities to insure customer service is provided in a timely and courteous manner to effectuate complete customer satisfaction.
2. Provides for the process definition and management of telephones, radio and pager utilization at all groups.
3. Manages the problem determination and repair for all telephones, radios and alarms utilized throughout the enterprise.
4. Coordinates and manages the acquisition, placement, installation and relocation of all equipment.
5. Directs, motivates, delegates and empowers staff in the successful performance of their tasks and responsibilities while encouraging innovation.
6. Investigates and assesses state-of-the-art technology as it relates to telephones, radios and alarms in the fulfillment of business goals and objectives.
7. Directs the identification, technical evaluation, testing, validation, and implementation of new and existing equipment and technologies to meet existing and expanding enterprise business requirements.
8. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
9. Performs all responsibilities within the guidelines of enterprise policies and directives at or above the enterprise's performance and evaluation standards.
10. Trains, supervises, assigns projects to, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.

Authority

- Direct the telephone and radio services staff.
- Recommend and implement new technologies in regard to radios and alarms throughout IT.
- Manage and coordinate all repairs required to radios and alarms utilized within the enterprise.
- Establish radio and alarm product standards.
- Identify potential problems before they occur and implement solutions.
- Review workload and staffing requirements, make recommendations regarding employment, promotions, salary adjustments, and termination.
- Perform employee counseling and work performance evaluations.
- Schedule and prioritize work to accommodate IT and customer needs while minimizing impact on current projects.

Position Requirements

- Certification and/or degree from a technical trade school or equivalent experience required

- BS or BA degree in computer science, mathematics or related field desired
- 4 years experience with telephone, radio and alarm technology with 2 years in a management role desired
- Knowledge at the expert level of current techniques and hardware capabilities of a large scale database, data communications and telecommunications environment
- Ability to plan and control projects
- Ability to understand and clearly relate to other members of the organization, technical manuals, radio and alarm specifications and principals of operations

Career Ladder

The successful Manager Telephone and Radio Services is likely to have the opportunity to move into other facilities management roles and may be able to move into telecommunications management depending upon technical background and experience.

Manager, Telephone and Radio Services

Midrange Programmer/Analyst

Position Description

Develops, encodes, tests, debugs, documents, and installs programs to support general business applications. Prepares program specifications and diagrams, and develops coding logic flowcharts. Develops programs on midrange computers such as the IBM AS/400 or UNIX based mini/midrange computers in languages such as COBOL and RPG, or fourth-generation business-oriented languages.

Essential Position Functions

Principal Duties & Responsibilities

1. Maintains and modifies existing applications programs.
2. Writes new programs of moderate complexity and scope, working with basic applications systems designs and specifications and utilizing standards procedures and techniques.
3. Assists higher-level programmers in the development of complex programs. Work assignments at this level are aimed more at production than at training. All work is subject to approval from higher levels.
4. Works on routine, well defined, analysis-type problems related to a single activity or procedure and having some variety and or moderate difficulty.
5. Analyzes source and content of data.
6. Works on computer programs usually dealing with routine record-keeping types of operations.
7. Prepares programs requiring a wide variety and extensive number of internal processing actions.
8. Participates in certain aspects of user consulting, systems analysis, general systems design, vendor contracts and detail systems design.
9. Learns user functions, organization and role in the enterprise to the extent required.

Authority

- Develop analysis and design of systems and/or programs.
- Generate and test program code.
- Document program code.
- Assist others with debugging whenever necessary.

Position Requirements

- High School diploma or equivalent required
- BS or BA degree in computer science, business administration or related field is preferred
- 2 years experience in programming using the basic programming language of the installation
- Familiarity with existing midrange system required
- Primary experience should be with midrange applications
- Ability to do debugging, data analysis and systems analysis
- Good written and oral communications skills

Career Ladder

Continued technical leadership within technical support and IS.

Midrange Programmer/Analyst

Network Analyst

Position Description

Responsible for analyzing and evaluating all aspects of systems and network software support across IS locations and customer sites as required. Addresses issues of inter-operability within the local and remote IS network to support enterprise growth and the development of new business opportunities.

Monitors and identify trends of the network on the network utilization, anticipate future demands and provide necessary capacity to maintain service levels. Growth, adjustment, and changes to the network must be planned and implemented so as to minimize impact on production systems.

Essential Position Functions

Principal Duties & Responsibilities

1. Assists the computer operations management in implementing and managing the enterprise network including wide area, local area, and value added components where applicable.
2. Evaluates products for applicability, adaptation and recommendation.
3. Performs installation and testing of software products individually or as part of a team.
4. Analyzes requirements and components of systems and network software support.
5. Develops documentation and design techniques to support current and test planned network equipment configurations.
6. Performs analysis that includes mainframe and network software impact on planned computing strategies.
7. Evaluates overall network requirements for performance, availability, utilization and reliability.
8. Provides planning and technical support for enterprise installations as required.
9. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
10. Performs at or above enterprise IT Performance Evaluation Guidelines.

Authority

- Inform management of potential service level problems before they occur and communicate solutions.
- Direct self and the activity of others during the testing, monitoring and installation of the network software as required.
- Schedule and prioritize work to accommodate IT and customer needs while minimizing impact on current projects.
- Recommend communication vendor products and services.
- Lead and/or contribute to projects/committees that establish guidelines, set procedures, outline standards, and monitor for industry compliance.
- Contribute to the training and development of IT personnel in direct support of IT delivery of services.
- Work with all departments to make sure that their networks are secure, cost effective, maintainable and add value to the business.

Position Requirements

- BS or BA degree in computer science, business administration or related work experience
- 2 –3 years experience in network analysis and support
- 3 – 5 years experience with wide and local area networks including experience with common-carrier data networks
- Ability to communicate effectively with internal and customers and suppliers
- Experience with large to very large enterprise networking environments that include multiple site locations

Career Ladder

The next logical career step for the successful Computer Equipment/Network Analyst would be to become Supervisor Network Services.

Network Analyst

Network Services Administrator

Position Description

Assists in department administrative functions including writing network documentation and procedure manuals. The administrator maintains documentation that records progress on network projects.

Essential Position Functions

Principal Duties & Responsibilities

1. Provides staff support to the Manager Network Services for equipment and supply procurements.
2. Provides project tracking to insure the project and day-to-day work schedules are being met.
3. Writes network documentation manuals and network procedure manuals and keeps track of updates to these documents.
4. Assists in request form completion for outside personnel.
5. Track requests for telephone equipment, security requests, computing equipment, de-installations, relocation, and installations as well as any other related requests.

Authority

- Prepare network documentation on procedures.
- Interface with outside vendors and service providers.

Position Requirements

- BS or BA in business administration or computer science or equivalent related experience
- 3 to 5 years experience as a technical writer
- Thorough understanding of network procedure manuals and network procedures themselves
- Good interpersonal skills as well as excellent oral and written skills

Career Ladder

Lateral movement is possible into the positions of Data Security Administrator or Disaster Recovery Coordinator. Upward movement would take place after gaining experience in one of these more technical areas within data processing.

Network Services Administrator

Office Automation Applications Manager

Position Description

The Office Automation Application Manager is responsible for the overall coordination, control and support of personal computers and office automation applications within the enterprise. Duties include, but are not limited to the evaluation, implementation and training of new products or services, comprehensive systems analysis, and progressive support methodologies for all assigned applications and all applications supported within the IS organization or information center department.

Essential Position Functions

Principal Duties & Responsibilities

1. Directs the activities of the personal computer group in establishing and maintaining an effective client support relationship.
2. Establishes and maintains enterprise policy guidelines to optimize client support for office automation applications.
3. Manages the receipt and configuration of all hardware and software for the enterprise and subsidiaries.
4. Provides technical support and training to all the enterprise clients who have purchased software packages or developed in-house applications on a personal computer.
5. Defines requirements and coordinates with service vendors to maintain personal computer hardware and maximize PC availability to enterprise clients.
6. Manages individual and group training programs, including the creation and development of classroom curriculum, and also has the ability to conduct all levels of training classes.
7. Insures that all client requests and problems are being appropriately and adequately resolved in a timely manner to the clients satisfaction.
8. Establishes and maintains a positive working relationship with all enterprise departments to optimize working relationships and communication.
9. Performs at or above enterprise's Information Technology performance standards.

Authority

- Direct personal computer group activities.
- Establish/maintain enterprise policy guidelines relating to office automation.
- Manage all hardware and software relating to office automation.

Position Requirements

- High school diploma required
- BS or BA degree in computer science, business administration, or related field is desired
- 3 years of supervisory experience
- 3 years of personal computer experience
- 2 years of office automation experience
- 3 years experience in the enterprise's computing environment
- 2 years of experience in a training environment
- Excellent verbal and written communication skills

Career Ladder

This position could lead to management positions within applications, technical support, or operations. This position would naturally lead into management activities rather than continued emphasis on technical skills.

Office Automation Applications Manager

Operations Analyst

Position Description

The Operations Analyst is responsible for providing technical guidance for planning, directing and monitoring Information Technology operations. The Analyst analyzes proposed and actual projects in terms of equipment and personnel costs; plans and recommends machine modifications and additional equipment to increase the capacity of the system; monitors and allocates direct access storage device (DASD) space. The Analyst reports to the Senior Operations Analyst.

Essential Position Functions

Principal Duties & Responsibilities

1. Investigates and insures resolution of all production processing problems for batch and on-line services.
2. Identifies and resolves production problems involving disk allocation, device assignments, job streams and run schedules.
3. Coordinates the resolution of application and software systems problems impacting production.
4. Assists systems and programming personnel as requested.
5. Assists in resolving technical computer operations equipment problems.
6. Initiates corrective action or carry out instructions to resolve system abends on production jobs.
7. Logs and documents Information Technology production problems, this includes creating trouble managing system (TMS) records.
8. Identifies reoccurring and potential operations problems.
9. Recommends controls for prevention.
10. Investigates alternative methods to expedite problem resolution.
11. Responds to user requests for information and assists in problem resolution.
12. Maintains contact with users on operational and production problems.
13. Monitors and controls direct access storage device (DASD) files to insure effective space utilization.
14. Allocates storage space and deletes obsolete files.
15. Checks and logs space availability during shifts.
16. Insures complete and accurate production turnovers to next shift.
17. Advises shift personnel regarding production status.
18. Prepares operational cost estimates for current and proposed projects; evaluates vendor proposals for purchases of hardware.
19. Advises and consults on organizational, procedural, and work low plans, methods and procedures analysis.
20. Analyzes the results of monitoring the operating system and recommends changes to improve processing and utilization.
21. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
22. Strives to learn the job functions of the position's immediate superior as well as peer level positions with whom the individual interacts. It is the responsibility of the individual to be prepared for temporary re-assignment and/or promotion due to extended illness, personal emergency or business necessity.
23. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.

24. Develops and maintains service level agreements with the various user departments and enterprise business units.
25. Performs at or above the enterprise's Information Technology performance standards.

Authority

- Handle complex production and operational problems requiring individual judgment and latitude for independent action to solve these problems.

Position Requirements

- High school diploma or equivalent is required
- BS or BA degree in computer science, business administration, or related field is preferred
- Knowledge of computer hardware and software
- 3 - 4 years experience in IT. and/or computer operations analysis and problem resolution

Career Ladder

This position could lead into more technical analysis positions such as technical support analyst, or into managerial positions such as Computer Operations Shift Supervisor.

Operations Analyst

ORACLE Database Administrator

The Maricopa County Assessor's Office Information Services Division is looking for an Oracle Database Administrator, to work under the direct supervision of the Director of the Assessor's Information Center (AIC).

- The incumbent will work with the AIC's YR2K team to design, manage and implement the AIC's YR2K efforts.
- As a technical leader, the successful candidate has responsibility for the translation of Y2K conversion requirements into the physical and logical databases designs using *Oracle 7 and Oracle 8* technology, taking into consideration client needs, information security, and cost effectiveness,
- The successful candidate is considered an expert in the use of relational database technology to solve complex information management and technical problems.

Position Requirements

- Degree in Computer Science, Mathematics or Engineering.
- Six or more years experience in systems development, focusing principally on Oracle Database Administration for development and test environments.
- Demonstrated achievement in the delivery of complex information systems.
- Expert knowledge of relational database technology, Oracle version 7 and/or *(insert operating system fundamentals)*, database administration including data replication and performance tuning.
- Knowledge of Oracle CASE Designer 2000, object-oriented analysis, design and development and familiarity with Oracle fundamentals.
- Excellent general professional skills including communication, problem-solving, organizational, and time management skill.

This is a temporary assignment for up to 6 months. Compensation will be directly related to skills and project duration.

ECS: 1690

Manager, Site Operations

Position Description

The Operations Site Manager is responsible for planning, managing and supervising the daily activities of the overall site/shift computer operations to insure timely and successful completion of tasks and duties. The manager is responsible for system problem resolution to facilitate maximum on-line availability.

Essential Position Functions

Principal Duties & Responsibility

1. Manages the activities of the operations staff insuring that tasks are completed on a timely basis and in compliance with established operational and security methods, procedures and standards.
2. Monitors and directs the work flow and coordinates the flow of work between shifts to insure continuity, twenty-four hours a day, seven days a week.
3. Directs, motivates, delegates and empowers staff in the successful performance of their tasks and responsibilities while encouraging innovation.
4. Provides technical guidance to staff in performing daily duties, solving problems, and locating and overcoming error conditions.
5. Establishes work schedules to insure optimum utilization of staffing to meet workload requirements and negotiated levels of on-line system availability.
6. Analyzes hardware and software reliability reports to insure that equipment is properly utilized and maintained, and that hardware and software problems are observed, reported and resolved in a timely manner.
7. Consults with support personnel and related Information Technology work units to resolve operational problems referred by staff, and coordinates activities between organizational units to resolve conflicts.
8. Advises senior management as to operational conditions affecting on-line availability and other commitments.
9. Reviews and evaluates operating practices and procedures. Initiates or recommends action to improve operational effectiveness and makes decisions as needed to maximize on-line availability and expedite processing.
10. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel absence.
11. Performs all responsibilities within the guidelines of enterprise policies and directives at or above the enterprise's performance and evaluation standards.
12. Trains, supervises, assigns projects to, evaluates and is responsible for hiring/termination of staff to maintain optimum performance of job duties.

Authority

- Direct site and/or shift operations staff.
- Identify potential problems before they occur and implement solutions.
- Schedule and prioritize work to accommodate IT and customer needs while minimizing impact on current projects.
- Participate in the development and implementation of processes that improve efficiency and enhance productivity.

- Review workload and staffing requirements, make recommendations regarding employment, promotions, salary adjustments, and termination. Perform employee counseling and work performance evaluations.

Position Requirements

- High school diploma or equivalent
- BS or BA degree in computer science or related field preferred; or a corresponding number of years experience in IT.
- 5 years experience in computer operations, with 2 years in a management role desired
- Knowledge at the expert level of current techniques and hardware capabilities of a large scale computing environment
- Ability to plan and control projects
- Ability to communicate effectively dealing with internal and external customers and suppliers

Career Ladder

The Manager Site/Shift Operations would logically progress into a managerial position within the computer operations. The most practical position to assume would be the Manager Production Services or Manager Site Management.

Manager, Site Operations

ORACLE Database Administrator

The Maricopa County Assessor's Office Information Services Division is looking for an Oracle Database Administrator, to work under the direct supervision of the Director of the Assessor's Information Center (AIC).

- The incumbent will work with the AIC's YR2K team to design, manage and implement the AIC's YR2K efforts.
- As a technical leader, the successful candidate has responsibility for the translation of Y2K conversion requirements into the physical and logical databases designs using *Oracle 7 and Oracle 8* technology, taking into consideration client needs, information security, and cost effectiveness,
- The successful candidate is considered an expert in the use of relational database technology to solve complex information management and technical problems.

Position Requirements

- Degree in Computer Science, Mathematics or Engineering.
- Six or more years experience in systems development, focusing principally on Oracle Database Administration for development and test environments.
- Demonstrated achievement in the delivery of complex information systems.
- Expert knowledge of relational database technology, Oracle version 7 and/or *(insert operating system fundamentals)*, database administration including data replication and performance tuning.
- Knowledge of Oracle CASE Designer 2000, object-oriented analysis, design and development and familiarity with Oracle fundamentals.
- Excellent general professional skills including communication, problem-solving, organizational, and time management skill.

This is a temporary assignment for up to 6 months. Compensation will be directly related to skills and project duration.

ECS: 1690

Personal Computer (PC) Analyst

Position Purpose

The Personal Computer Analyst is responsible for the overall coordination, control and maintenance of Personal Computers within the enterprise to insure compatibility and integration with enterprise strategies. Installs new and/or expands existing microprocessor based computer systems. Determines required software and hardware in conjunction with end users. Programs or selects suitable software to meet user requirements. Installs new and maintains existing hardware. May train users in use of equipment.

Essential Position Functions

Principal Duties & Responsibilities

1. Identifies and initiates resolutions to client problems and concerns associated with office automation equipment, hardware and software to the client's satisfaction.
2. Plans and coordinates the purchase, installation and implementation of office automation hardware and software according to department standards and procedures.
3. Analyzes training needs of office automation clients, develops classroom curriculum and provides quality individual and group training programs designed to insure maximum utilization of equipment.
4. Maintains software and hardware registration and inventory to provide upgrades as necessary and insure appropriate security levels are maintained.
5. Upholds the enterprise policy guidelines as well as recommend new and improved guidelines to insure compatibility and better service enterprise users of personal computers.
6. Maintains current technical expertise in the rapidly changing technology of microcomputers and utilizes state-of-the-art techniques when implementing office automation solutions.
7. Prepares weekly status reports quantitatively reporting results of office automation activities.
8. Maintains a positive working relationship with all enterprise departments to optimize working relationships and communication.
9. Fulfills department requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
10. Performs at or above enterprise performance standards established within the department.

Authority

- Resolve problems with client PC hardware and software.
- Plan and coordinate PC hardware and software purchases and implementations.
- Analyze training needs and develop training programs and curriculum.

Position Requirements

- High school diploma or equivalent is required
- BS or BA degree in computer science, business administration, or related field is preferred
- 3 years of personal computer experience
- Strong written and verbal communication skills

Career Ladder

The career track for this position is continual technical leadership within the operations, technical services and user organizations.

Personal Computer Analyst

Personal Computer (PC)/Local Area Network (LAN) Technician

Position Description

Installs microcomputer hardware and peripheral components, such as monitors, keyboards, printers and disk drives. Loads and verifies correct operation of software packages, such as operating system, word processing and spreadsheet programs. Provides training and technical assistance to users. Identifies and resolves hardware, software and operator problems, makes repairs, or refers to service personnel. Has ability to troubleshoot and diagnose severity of LAN problems and make minor repairs or refer major problems to LAN Administrator or LAN Manager.

Essential Position Functions

Principal Duties and Responsibilities

1. Troubleshoot and resolve hardware problems with little or no supervision.
2. Troubleshoot and resolve software problems with little or no supervision.
3. Work with helpdesk and trouble call software to prioritize and manage support calls.
4. Manage priorities with respect to support calls and scheduled installations of hardware and software to ensure their timely completion.
5. Maintain high level of communication with customers with respect to scheduling hardware and software installations and support calls.
6. Troubleshoot and distinguish between common types of LAN connectivity problems, and resolve them with little or no supervision.
7. Distinguish between major and minor LAN problems, and report major problems to LAN Administrator(s) and LAN Manager. Work with LAN Manager to resolve LAN problems.
8. Manage LAN accounts including additions, deletions, moves, and changes.
9. Install and configure server based and regular software packages onto network servers to facilitate deployment to clients.
10. Manage disk space and monitor other network resources.

Authority

- Resolve problems with client PC hardware and software.
- Work with PC users within the enterprise and with external microcomputer vendors.
- Identify potential service level problems before they occur and implement solutions.

Position Requirements

- High school diploma or equivalent is required
- Associate degree or 2 years at a technical school required
- BS or BA degree in computer science, business administration, or related field is preferred
- 1-2 years of personal computer experience
- Strong written and verbal communication skills

Career Ladder

The career track for this position is LAN Administrator to LAN Manager track or a continual technical leadership within the operations, technical services and user organizations.

Personal Computer (PC)/Local Area Network (LAN) Technician

Personal Computer (PC) Support Specialist

Position Description

Installs microcomputer hardware and peripheral components, such as monitors, keyboards, printers and disk drives. Loads and verifies correct operation of software packages, such as operating system, word processing and spreadsheet programs. Provides training and technical assistance to users. Identifies and resolves hardware, software and operator problems, makes minor repairs, or refers to service personnel.

Essential Position Functions

Principal Duties and Responsibilities

1. Troubleshoot and resolve hardware problems with little or no supervision.
2. Troubleshoot and resolve software problems with little or no supervision.
3. Work with helpdesk and trouble call software to prioritize and manage support calls.
4. Manage priorities with respect to support calls and scheduled installations of hardware and software to ensure their timely completion.
5. Maintain high level of communication with customers with respect to scheduling hardware and software installations and support calls.
6. Distribute appropriate support calls installations to Hardware and Software Technician's.

Authority

- Resolve problems with client PC hardware and software.
- Work with PC users within the enterprise and with external microcomputer vendors.
- Identify potential service level problems before they occur and implement solutions.

Position Requirements

- High school diploma or equivalent is required
- Associate degree or 2 years at a technical school required
- BS or BA degree in computer science, business administration, or related field is preferred
- 1-2 years of personal computer experience
- Strong written and verbal communication skills

Preferred Certifications

- A+ Hardware Certification

Career Ladder

The career track for this position is to PC Technician Software to PC Technician Hardware to PC Support Specialist to PC/LAN Technician to PC/LAN Administrator to LAN Manager track or a continual technical leadership within the operations, technical services and user organizations.

Personal Computer (PC) Technician - Hardware

Position Description

Installs microcomputer hardware and peripheral components, such as monitors, keyboards, printers and disk drives. Loads and verifies correct operation of software packages, such as operating system, word processing and spreadsheet programs. Provides training and technical assistance to users. Identifies and resolves hardware, software and operator problems, makes minor repairs, or refers to service personnel.

Essential Position Functions

Principal Duties and Responsibilities

1. Troubleshoot and resolve hardware problems with little or no supervision.
2. Work with helpdesk and trouble call software to prioritize and manage hardware-related support calls.
3. Manage priorities with respect to support calls and scheduled hardware installations to ensure their timely completion.
4. Maintain high level of communication with customers with respect to scheduling hardware installations and support calls.
5. Recognize and forward software-specific problems to Software Technician and/or Support Specialist.
6. Maintain inventories of customer PCs, spare PCs, and spare parts.

Authority

- Resolve problems with client PC hardware and software.
- Work with PC users within the enterprise and with external microcomputer vendors.
- Identify potential service level problems before they occur and implements solutions.

Position Requirements

- High school diploma or equivalent is required
- Associate degree or 2 years at a technical school required
- BS or BA degree in computer science, business administration, or related field is preferred
- 1-2 years of personal computer experience
- Strong written and verbal communication skills

Preferred Certifications

- A+ Hardware Certification

Career Ladder

The career track for this position is PC Support Specialist to PC/LAN Technician to LAN Administrator to LAN Manager track or a continual technical leadership within the operations, technical services and user organizations.

Personal Computer (PC) Technician – Hardware

Personal Computer (PC) Technician – Software

Position Description

Loads and verifies correct operation of software packages, such as operating system, word processing and spreadsheet programs. Provides training and technical assistance to users. Identifies and resolves software and operator problems, makes minor repairs, or refers to service personnel.

Essential Position Functions

Principal Duties and Responsibilities

1. Troubleshoot and resolve software problems with little or no supervision.
2. Work with helpdesk and trouble call software to prioritize and manage support calls.
3. Manage priorities with respect to support calls and scheduled installations of software to ensure their timely completion.
4. Maintain high level of communication with customers with respect to scheduling software installations and support calls.
5. Recognize and forward hardware-specific problems to Hardware Technician and/or Support Specialist.

Authority

- Resolve problems with client PC software.
- Work with PC users within the enterprise and with external microcomputer vendors.
- Identify potential service level problems before they occur and implement solutions.

Position Requirements

- High school diploma or equivalent is required
- Associate degree or 2 years at a technical school required
- BS or BA degree in computer science, business administration, or related field is preferred
- 1-2 years of personal computer experience
- Strong written and verbal communication skills

Career Ladder

The career track for this position is PC Support Specialist to PC/LAN Technician to LAN Administrator to LAN Manager track or a continual technical leadership within the operations, technical services and user organizations.

PC Technical Writer

Position Description

Provides consistent and uniform written descriptions of micro/minicomputer generated reports in accordance with established documentation procedures. Continually monitors system changes to ascertain effects on system documentation. Participates in the development of documentation standards.

Production Control Analyst

Position Description

The Production Control Analyst's principle responsibility is reviewing documentation for the operations production environment. The analyst maintains the enterprise computer job schedules, entailing job setup, report distribution, and screening user requests. The Production Control Analyst can report to the Lead Computer Operator or the next supervisory level position.

Essential Position Functions

Principal Duties & Responsibilities

1. Screens user requests to insure that all requested information is supplied.
2. Reviews job documentation to insure completeness, accuracy, and clarity. If necessary, corrects any user documentation errors noted working with the individual programmers.
3. Insures the documentation is complete and the proper standards have been followed, that the jobs are installed into production in a timely manner.
4. Builds generation data groups and maintains the tape management database as requested by the programmer.
5. Maintains the report distribution database and assures the accuracy of this file.
6. Reviews run documentation for all user requests.
7. Checks the accuracy of all the information in the enterprise job scheduling systems.
8. Places new jobs into the scheduling systems using the following information: job name, parameter information, dependency information, scheduling occurrences, report names, and report distribution.
9. Assists Production Control Analysts Senior with any of their responsibilities.
10. Assumes responsibility for other production control functions as job experience and time allows.
11. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
12. Strives to learn the job functions of the position's immediate superior as well as peer level positions with whom the individual interacts. It is the responsibility of the individual to be prepared for temporary re-assignment and/or promotion due to extended illness, personal emergency or business necessity.
13. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
14. Performs at or above the enterprise's Information Technology performance standard.

Authority

- Define the production job schedule for the computing environment for the enterprise site.

Position Requirements

- High school diploma or equivalent is required
- BS or BA degree in computer science, business administration, or related field is preferred
- 2 years operations experience, preferable on several hardware environments
- Experience is required in the areas of operating system software, job control languages, and utilities

- Programming knowledge is desirable
- Enthusiastic, outgoing team player who wants to start a career in Information Technology
- Ability to communicate effectively, both in writing and orally

Career Ladder

This position could lead to positions within production services such as Production Control Analyst Senior, or provide lateral movement into the positions of Operation Analysis or Programmer/Analyst.

Production Control Analyst

Project Manager

Position Description

The Project Manager is responsible for overseeing the project team created or assigned to the project. This group is responsible for the database systems and applications that form the basis of the project. This responsibility includes transaction processing security, resource monitoring and reporting and the development of specialized programs. The Project Manager coordinates issues with other IS organizations including applications, operations, and technical services.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages and directs the project team including setting priorities, coordinating, and the reporting of group activities. The Project Manager is responsible for the daily activities of the project members.
2. Provides senior technical leadership to IT and the enterprise including being conversant with the future direction of the project and systems, how that direction will impact the enterprise, and how future and current systems can be exploited for the benefit of the enterprise.
3. Serves as a source of documentation and standards to help direct the activities of IT as a whole.
4. Works closely with other groups to coordinate plans and activities including coordination to facilitate specific development projects that involve the project.
5. Attends development and design walk through.
6. Provides weekly and monthly reports to the senior management, including the IS Director and CIO.
7. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
8. Presents at local and national user groups.
9. Publishes articles describing both the enterprise's activities and assessments of technology.
10. Participate with the hardware and software vendor and other vendors in the assessment of advanced transaction processing and database productions including beta and field test participation.
11. Performs at or above the enterprise's Information Technology performance standards.
12. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Oversee the activities of the project team including scheduling and prioritizing group activities.
- Oversee the day to day operation and its integrity, including both applications and database installations.
- Manage the personnel of the project team.
- Coordinate the activities of the group with other IT and enterprise organizations.
- Provide technical leadership to IT and the enterprise.

Position Requirements

- BS or BA degree in computer science, information systems or a related field.
- Graduate degree is highly desirable
- 5 years of programming experience
- 3 years with relational databases and systems, preferably in the enterprise's computing environment programming experience
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience

Career Ladder

This position could lead to management or project management positions within applications, technical support, or operations. This position would naturally lead into management activities rather than continued emphasis on technical skills.

Project Manager

Project Manager Distributed Systems

Position Purpose

The Project Manager Distributed Systems is responsible for overall management and direction of all technical services functions associated with remote location applications, data communications, operating systems, database administration and applications systems software. The project manager works with Information Technology and Senior Business Leaders regarding these areas.

Essential Position Functions

Principle Duties & Responsibilities

1. Interfaces distributed systems software with the hardware configuration and with business application systems.
2. Assists in the scheduling and the integrity of data transmission to and from remote locations.
3. Installs and supports distributed software.
4. Maintains a close working relationship with systems services members.
5. Insures that all distributed software, and distributed software problems are solved in a timely and efficient manner with minimal impact on field operations.
6. Assists in the evaluation of distributed software issues, policies and procedures including standardization, purchasing, evaluations, configuration, training and networking.
7. Assists in developing and coordinating reporting activities including distributed equipment usage procedures and personnel time and project allocation.
8. Writes procedural memorandums for systems operations and implementation staff when necessary.
9. Maintains current knowledge of technical innovations in mainframe, minicomputer, LAN, and personal computing.
10. Performs at or above the enterprise's Information Technology performance standard.

Authority

- Work with other department managers and directors, and all levels of Technical Staff.

Position Requirements

- BA or BS Degree in computer science or business administration
- 4 years experience in a distribution systems environment
- 4 years experience in project management
- 2 years experience minimum in management (supervisor level)
- 2 years experience minimum with scanning equipment
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience
- Ability to correlate complex business processes with optimum technology solutions.

Career Ladder

To advance within the applications group as the enterprise grows and/or move into other lateral areas within the Information System function. The overall objective would be to gain the experience necessary to become a project manager of technical support.

Project Manager Distributed Systems

Project Manager, Applications

Position Description

The Applications Project Manager is responsible for overseeing the transaction-processing group within technical support. This group is responsible for the enterprise database systems and transaction processing systems that form the basis of our computer systems. This responsibility includes transaction processing security, resource monitoring and reporting and the development of specialized programs. The Applications Project Manager coordinates transaction processing software issues with other IS organizations including applications and operations.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages and directs for the transaction processing group including setting priorities, coordinating, and the reporting of group activities. The Project Manager Applications is responsible for the daily activities of the members of the database applications group.
2. Provides senior technical leadership to IT and the enterprise including being conversant with the future direction of transaction processing systems, how that direction will impact the enterprise, and how future and current systems can be exploited for the benefit of the enterprise.
3. Serves as a source of documentation and standards to help direct the activities of IT as a whole.
4. Works closely with other groups to coordinate plans and activities including coordination to facilitate specific development projects that involve the database and on-line processing, the coordination of software upgrades, and the installation of new transaction processing programs, as well as transaction processing programs developed externally.
5. Attends development and design walk through.
6. Provides weekly and monthly reports on transaction processing performance as well as forecasts of future utilization.
7. Recognizes and identifies potential areas where existing transaction processing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
8. Presents at local and national user groups.
9. Publishes articles describing both the enterprise's activities and assessments of technology.
10. Participate with the hardware and software vendor and other vendors in the assessment of advanced transaction processing and database productions including beta and field test participation.
11. Performs at or above the enterprise's Information Technology performance standards.
12. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Oversee the activities of the transaction processing group including scheduling and prioritizing group activities.
- Oversee the day to day database operation and its integrity, including both applications and database installations.
- Manage the personnel of the transaction-processing group.
- Coordinate the activities of the group with other IT and enterprise organizations.
- Provide technical leadership to IT and the enterprise.

Position Requirements

- BS or BA degree in computer science, information systems or a related field.
- Graduate degree is highly desirable
- 5 years of programming experience
- 3 years with relational databases and transaction processing systems, preferably in the enterprise's computing environment programming experience
- 4 years experience in project management
- 2 years experience minimum in management (supervisor level)
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience

Career Ladder

This position could lead to management or project management positions within applications, technical support, or operations. This position would naturally lead into management activities rather than continued emphasis on technical skills.

Project Manager, Applications

Project Manager, Network Technical Services

Position Purpose

The Project Manager Network Technical Services is responsible for managing the technical communications network that supports active projects including but is not limited to developing plans and schedules, interfacing with vendors, training personnel, and providing “hands on” assistance wherever necessary.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages the network services technical staff on active projects.
2. Researches and proposes new technologies applying to the network services area.
3. Interfaces with external vendors and the enterprise's training department personnel.
4. Prepares project plans and makes scheduling decisions for network upgrades.
5. Works with the Manager Network Services to develop departmental and project budgets.
6. Performs “hands on” work (i.e., pulling cables, writing configurations, etc.) when necessary.

Authority

- Recommend personnel hiring, firing, transfer, demotion and promotion for network personnel.
- Direct and schedule the activities of personnel assigned to network services projects.
- Recommend new network technology to the Manager Network Services.

Position Requirements

- High school diploma is required
- BS or BA in computer science or telecommunications is highly recommended
- 5 - 7 years in a distributed network environment is required
- Ability to work well with people with varying technical abilities
- 2 - 4 years of project management experience including staff supervision
- Good oral and written communication skills

Career Ladder

The logical career progression for the Project Manager Network Technical Services would be to advance into the position of Manager Network Services.

SENIOR INFORMATION SYSTEMS (IS) AUDITOR

Position Description

Under the direction of the IS Audit Manager, the Senior IS Auditor performs professional and technical audits of automated systems and data center operations throughout the County. The Senior IS Auditor also assists in identifying and evaluating the County's investment in information technology and in establishing and implementing the IS section of the County's annual audit plan.

Essential Position Functions

Principal Duties and Responsibilities

1. Assists the IS Audit Manager with risk assessments of County technologies and annual strategic planning of IS audits.
2. Plans and develops IS audit work programs.
3. Undertakes and leads audits, including new computer system development projects; packaged software reviews; post implementation system reviews; data center operations; network security and integrity; applications and systems software audits; and business recovery and contingency planning.
4. Performs fieldwork and appropriate testing procedures.
5. Develops, codes, executes, and maintains basic computer audit programs and documentation in support of IS, Financial, and Performance audit requests.
6. Analyzes and interprets audit results and prepare audit report, findings, and recommendations in a timely manner that is easily understood by County management.
7. Attends opening and closing conferences with County management to explain audit procedures and to review audit findings and recommendations.
8. Conducts follow-up evaluation to verify implementation of audit recommendations and to assess impact.
9. Provides technical support and consultation to non-IS and external auditors as requested.
10. Acts as a consultant in recommending appropriate controls for new systems under development, data security and integrity, contingency planning or other technology related areas.
11. Performs other similar and related duties as required or directed.

Position Requirements

- Bachelor's Degree in Business Administration, Computer Science, Accounting, or related field
- Four to six years of progressively responsible experience in Information Systems Auditing.
- Knowledge of generally accepted accounting principles and IS Auditing Standards.
- An understanding of management principles and the ability to recognize and evaluate deviations from good business practice.
- Knowledge of programming and querying tools (i.e.: TSO/ISPF, JCL, COBOL, SQL, ACL or other data base programs); systems analysis and design; data file structures; and file access methods.
- Knowledge of operating systems, security systems, data base management systems, data and telecommunications systems.
- Ability to work effectively and efficiently with a minimum of direction.
- Keeps current of new developments in technology assessing the impact to current application programs and computer systems within the County.
- Demonstrated strong report writing skills and superior verbal communication skills.
- High level of proficiency in PC hardware and commonly-used software packages.

Certificates

Professional Certification as an Information Systems Auditor (CISA) highly desired; Masters Degree may substitute for certification.

Career Ladder

This position can lead to an IS Audit management position, or an information technology consultant position.

Senior Network Specialist

Position Purpose

The Network Specialist Senior is responsible for all aspects of network communications at the enterprise including terminals, local area networks, communications with remote enterprise installations, problem solving, vendor interfacing modem communications, technical training, and network security. The Senior Network Specialist must be familiar with LAN topology and software including MSAU, servers, LAN bridges and gateways.

Essential Position Functions

Principal Duties & Responsibilities

1. Assists the Network Supervisor in designing and managing the enterprise network including wide area and local area networks.
2. Provides input to management for network design, procurement of network equipment and supplies.
3. Performs equipment installations and relocation as required to support the business needs of the enterprise.
4. Monitors and tunes the enterprise network for optimal performance.
5. Acts as the primary interface with equipment vendors for resolving problems.
6. Establishes a growth plan for the network to insure the best quality service in a state-of-the-art environment.
7. Provides planning and technical support for enterprise installations.
8. Provides network support for operations and the mainframe side of technical support.
9. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
10. Participates with vendors in the assessment of advanced retail transaction processing and database productions including beta and field test participation.
11. Performs at or above the enterprise's Information Technology performance standard.
12. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Direct the activities of the Network Technicians. The Network Technicians will be responsible for the day to day repair, monitoring and installation of the network.
- Schedule and prioritize network activities.
- Evaluate vendors for data communication.
- Design the enterprise network and integrate it with other enterprise activities.
- Develop and document network related policies and procedures including network security.
- Work with all departments to make sure that their data communication requirements are satisfied.
- Participate in telecommunication related task force whenever necessary.
- Work with architects, building landlords, contractors, various telephone companies, external Information Technology organizations, and equipment vendors.

Position Requirements

- High school diploma or equivalent is required
- BS or BA degree in computer science, business administration or related work experience
- 2 - 3 years experience as a Network Analyst
- 3 - 5 years experience with wide and local area networks including experience with common-carrier data networks
- Ability to communicate effectively and to deal with equipment vendors
- Knowledge at the expert level of X-25, SNA, Internet networks, connections, wiring and cabling, and network management

Career Ladder

As the enterprise network continues to grow, the Network Specialist Senior will have the opportunity to expand into a more advanced technical position or a project manager position within network services such as Network Project Manager.

Senior Network Specialist

Senior Systems Programmer

Position Description

The Systems Programmer Senior installs, tests, maintains, documents, and provides technical support for systems software, as well as modifying existing and creating new systems software for specific enterprise needs. The Systems Programmer Senior performs software product planning evaluation and testing, assists in planning hardware changes, and provides direction and assistance to the subordinate systems programming staff.

Essential Position Functions

Principal Duties & Responsibilities

1. Installs, tests, maintains, and documents systems software, operating systems, compilers, utility programs, teleprocessing monitor, database management systems, etc.
2. Modifies existing and/or creates new software for specific enterprise needs; provide technical support to the applications and operations staff on the use of system software.
3. Participates in feasibility studies for the installation of new hardware.
4. Supports the installation planning for hardware or applications program requirements and coordinates the corresponding system software changes.
5. Performs software product evaluation, including planning, installation, testing, and technical support for the applications and/or computer operations staff.
6. Provides direction and assistance to the subordinate system programming staff to assure the proper integration of all systems software within his area of responsibility such as teleprocessing or the operating system.

Authority

- Install new software releases and/or patches.
- Recommend new software and hardware products.

Position Requirements

- High school diploma or equivalent is required
- BS or BA degree in computer science or related technical field preferred, or a corresponding number of years experience in IT.
- 4 years experience with operating systems and other associated software in the enterprise's computing environment
- Ability to understand, and relate to other members of the organization
- Ability to understand technical manuals, software specifications, hardware principals of operations, and systems software operations

Senior Systems Support Specialist

Position Description

The Senior Systems Support Specialist is responsible for overseeing the systems support specialist in system management and system programming on the enterprise computers including system configuration, troubleshooting, security, resource monitoring, and the development of specialized programs.

Essential Position Functions

Principal Duties & Responsibilities

1. Generates, tunes, configures, and upgrades the operating system.
2. Evaluates system performance and reports to management.
3. Assists in system disaster recovery assistance.
4. Defines development tools and procedures for daily operational support.
5. Supports application activities that require specialized system programming.
6. Performs at or above the enterprise's Information Technology performance standards.
7. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Manage the Systems Support Specialist.
- Direct all aspects of system generation including tuning and upgrades.
- Monitor and report system performance.
- Develop and maintain system problem analysis and resolution techniques.
- Analyze and resolve system problems quickly and efficiently.
- Support applications and enterprise operations with technical consultation and specialized programming.
- Evaluating enterprise and third party hardware and software and reporting significant findings to management.

Position Requirements

- BS or BA degree in computer science or related field
- 5 years of programming experience, three in system programming
- Ability to express complex technical concepts effectively, both verbally and in writing, is critical for this position
- Ability to work well with people from different disciplines with varying degrees of technical experience

Career Ladder

The career track for this position is continued technical and managerial leadership within Information Systems.

Senior Systems Support Specialist

Senior Technical Specialist

Position Description

The Senior Technical Specialist is responsible for system management and system programming on the computing environment including system configuration, troubleshooting, security, resource monitoring, and the development of specialized programs.

Essential Position Functions

Principal Duties & Responsibilities

1. Generates, tunes, configures, and upgrades the operating system.
2. Evaluates system performance and reports to management.
3. Assists in system disaster recovery assistance.
4. Defines development tools and procedures for daily operational support.
5. Supports application activities that require specialized system programming.
6. Performs at or above the enterprise's Information Technology performance standards.
7. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Direct all aspects of system generation including tuning and upgrades.
- Monitor and report system performance.
- Assist in the development and maintenance of system problem analysis and resolution techniques.
- Analyze and resolve system problems quickly and efficiently.
- Support applications and operations with technical consultation and specialized programming.
- Coordinate the activities of more junior technical support staff.
- Evaluating the hardware and software vendor and third party hardware and software and report significant findings to the operating systems production manager.

Position Requirements

- BS or BA degree in computer science or related field
- 5 years of programming experience, three in system programming
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from different disciplines with varying degrees of technical experience.

Career Ladder

This position offers two different career tracks. The first is for continued technical leadership within applications, operations or technical support. The second track would be to become an Operating Systems Production Manager within technical support or a project manager in another department within IS.

Senior Technical Specialist

Software Engineer

Position Description

The Software Engineer is responsible for the analysis of business, engineering and scientific problems and is charged with the documentation and development of well-defined methods, procedures and programs in the delivery of practical systems solutions.

Essential Position Functions

Principal Duties & Responsibilities

1. Applies independent judgment, discretion and analysis in coordinating, developing and designing computerized information systems solutions for business, engineering and/or scientific problems to meet expanding or changing business requirements.
2. Defines and develops practical information system specifications utilizing pseudo-code, flowcharts, block diagrams, charts and layouts for solutions to business, engineering and/or scientific problems.
3. Conceives, creates, develops establishes and publishes new programming techniques, methods, procedures, approaches and standards working with basic and advanced applications system design techniques and methodologies.
4. Confers with end users and studies effectiveness of systems flow, data usage and manual or automated processes to identify ineffective or inefficient systems.
5. Communicates and coordinates with customers during the analysis, definition and development phases.
6. Determines the economic and operational feasibility of using computerized methods to satisfy information needs and presents proposals for new systems or the enhancement, improvement and/or replacement of existing systems.
7. Maintains awareness of state-of-the-art development tools, programming techniques, problem solving techniques and computing equipment.
8. Participates in certain aspects of end user consulting, systems analysis, general systems design, vendor contracts and detail systems design.
9. Learns user functions, organization and role in the enterprise to the extent required.
10. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
11. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
12. Performs at or above the enterprise's Information Technology evaluation standards.

Authority

- Analyze and design of methods, procedures, systems and/or programs.
- Generate and test program code.
- Document program code.
- Assist subordinates when necessary.

Position Requirements

- BS or BA degree with a computer science, engineering, business or mechanical engineering major or related field or equivalent experience required
- Masters degree in computer science, engineering or related field for senior and specialist level desired
- 2 - 3 years experience in programming using the language and/or CASE tools of the installation

- Familiarity with existing internal operating system is required
- Ability to communicate effectively when dealing with internal and external customers and suppliers both in writing and orally

Career Ladder

This position could lead to management or project management positions within applications, technical support, or operations. This position would naturally lead into management activities rather than continued emphasis on technical skills.

Software Engineer

Systems Analyst

Position Description

The Systems Analyst devises and designs computer system requirements for the solution of moderately difficult business problems, or for segments of more complex problems, and formulates procedures for their solutions. The Systems Analyst plays a major role in the development and implementation of major systems.

Essential Position Functions

Principal Duties & Responsibilities

1. Performs necessary investigation, analysis and evaluation to determine project feasibility.
2. Helps in developing project cost and benefit estimates to establish project worth including the development of alternative considerations leading to recommendations for new systems or equipment installations, or change to existing ones.
3. Advises the appropriate people on the implications of existing IT systems that can be applied to a problem.
4. Develops and/or evaluates previously refined data and programs and select from a range of alternatives to determine the appropriate action to be taken.
5. Receives only general supervision.
6. Performs routine duties independently; discusses or seeks approval on complex matters with the Senior Systems Analyst.
7. Helps the Senior Systems Analyst to estimate resource needs for analysts, programmers, user personnel, consultants, equipment, etc.
8. Develops or assists in the development of work plans, task sequencing, and the extent to which tasks may be performed concurrently.
9. Recommends plans for user and resource management approvals.
10. Specifies the number and kinds of records, files and/or documents to be used.
11. Analyzes charts and/or diagrams of the problem to be programmed and defines system requirements in terms of equipment capabilities.
12. Plans the full range of programming actions needed to achieve desired end-results on complex problems under the direction of the Senior Systems Analyst.

Authority

- Develop project plans and schedules.
- Analyze and proposes system development tasks.
- Develop project cost/benefits estimates.
- Estimate project-staffing requirements.
- Prepare routine project status reports.

Position Requirements

- High school diploma or equivalent is required
- BS or BA degree in computer science or related technical field preferred, or a corresponding number of years experience in data processing
- 3 - 4 years of systems design and programming work experience and additional advanced study preferred
- Ability to effectively work with people in other departments and/or outside of the enterprise

Career Ladder

The logical career ladder for the Systems Analyst would be to move into a Senior Systems Analyst and then to the project manager or a systems and programming position.

Systems Analyst

Systems Programmer

Position Description

The Systems Programmer installs, develops, tests, maintains, documents, and provides technical support for systems software, as well as modify operating systems, compilers, utilities, multiprogramming, and telecommunications systems. Creates new systems software for specific enterprise needs. The Systems Programmer assists with the software product evaluation, and testing. Interfaces with, and supports the applications programming effort.

Essential Position Functions

Principal Duties & Responsibilities

1. Assists with software product evaluation, including installation, testing, and technical support for the applications programming and/or the computer operations staff.
2. Generates, tunes, configures, and upgrades the operating system.
3. Evaluates system performance and reports to management.
4. Assists in system disaster recovery assistance.
5. Defines development tools and procedures for daily operational support.
6. Supports application activities that require specialized system programming.
7. Performs at or above the enterprise's Information Technology performance standards.
8. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.
9. Provides guidance to the Associate Systems Programmer to assure the proper integration of all software within his area of responsibility.

Authority

- Install new software releases and/or patches.
- Recommend new software and hardware products.

Position Requirements

- High school diploma required
- BS or BA degree in computer science or related technical field preferred, or a corresponding number of years experience in IT.
- 1 year as an Associate Systems Programmer or 3 years as an Applications Programmer, and that experience must be with a large operating systems and associated software in the enterprise computing environment
- Ability to understand, and relate to other members of the organization
- Ability to understand technical manuals, software specifications, hardware principals of operations, and systems software operations

Career Ladder

The Systems Programmer could advance into the Systems Programmer Senior Position, or move laterally into the Programmer/Analyst Senior.

Systems Programmer

Senior Systems Support Specialist

Position Purpose

The Systems Support Specialist Senior is responsible for overseeing the systems support specialist in system management and system programming on the enterprise computers including system configuration, troubleshooting, security, resource monitoring, and the development of specialized programs.

Essential Position Functions

Principal Duties & Responsibilities

1. Generates, tunes, configures, and upgrades the operating system.
2. Evaluates system performance and reports to management.
3. Assists in system disaster recovery assistance.
4. Defines development tools and procedures for daily operational support.
5. Supports application activities that require specialized system programming.
6. Performs at or above the enterprise's Information Technology performance standards.
7. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Manage the Systems Support Specialist.
- Direct all aspects of system generation including tuning and upgrades.
- Monitor and report system performance.
- Develop and maintain system problem analysis and resolution techniques.
- Analyze and resolve system problems quickly and efficiently.
- Support applications and enterprise operations with technical consultation and specialized programming.
- Evaluating enterprise and third party hardware and software and reporting significant findings to management.

Position Requirements

- BS or BA degree in computer science or related field
- 5 years of programming experience, three in system programming
- Ability to express complex technical concepts effectively, both verbally and in writing, is critical for this position
- Ability to work well with people from different disciplines with varying degrees of technical experience

Career Ladder

The career track for this position is continued technical and managerial leadership within Information Technology.

Senior Systems Support Specialist

Senior Technical Specialist

Position Description

The Senior Technical Specialist is responsible for system management and system programming on the computing environment including system configuration, troubleshooting, security, resource monitoring, and the development of specialized programs.

Essential Position Functions

Principal Duties & Responsibilities

1. Generates, tunes, configures, and upgrades the operating system.
2. Evaluates system performance and reports to management.
3. Assists in system disaster recovery assistance.
4. Defines development tools and procedures for daily operational support.
5. Supports application activities that require specialized system programming.
6. Performs at or above the enterprise's Information Technology performance standards.
7. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Direct all aspects of system generation including tuning and upgrades.
- Monitor and report system performance.
- Assist in the development and maintenance of system problem analysis and resolution techniques.
- Analyze and resolve system problems quickly and efficiently.
- Support applications and operations with technical consultation and specialized programming.
- Coordinate the activities of more junior technical support staff.
- Evaluating the hardware and software vendor and third party hardware and software and report significant findings to the operating systems production manager.

Position Requirements

- BS or BA degree in computer science or related field
- 5 years of programming experience, three in system programming
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from different disciplines with varying degrees of technical experience.

Career Ladder

This position offers two different career tracks. The first is for continued technical leadership within applications, operations or technical support. The second track would be to become an Operating Systems Production Manager within technical support or a project manager in another department within IS.

Senior Technical Specialist

System Support Specialist

Position Description

Provides functional and empirical analysis related to the design, development and implementation of software operating systems for the company's products, including, but not limited to, utility software, development software, and diagnostic software. Participates in the development of test strategies, devices and systems.

Essential Position Functions

Principal Duties & Responsibilities

1. Generates, tunes, configures, and upgrades the operating system.
2. Evaluates system performance and reports to management.
3. Assists in system disaster recovery assistance.
4. Defines development tools and procedures for daily operational support.
5. Supports application activities that require specialized system programming.
6. Assists with software product evaluation, including installation, testing, and technical support for the applications programming and/or the computer operations staff.
7. Performs at or above the enterprise's Information Technology performance standards.
8. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Direct all aspects of computer generation including tuning and upgrades.
- Monitor and report system performance.
- Develop and maintain computer problem analysis and resolution techniques.
- Analyze and resolve system problems quickly and efficiently.
- Support applications and enterprise operations with technical consultation and specialized programming.
- Evaluate hardware and software and report significant findings to the management.

Position Requirements

- BS or BA degree in computer science or related field
- 5 years of programming experience
- 3 years in system programming
- Ability to express complex technical concepts effectively, both verbally and in writing, is critical for this position
- Ability to work well with people from different disciplines with varying degrees of technical experience

Career Ladder

The career track for this position is continued technical leadership within Information Systems. A specific technical position above this one would be Senior Systems Support Specialist.

ECS: 4780

Levels 1 – 4

Level 1 = 0 – 1 year professional experience.

Level 2 = 1 – 3 years professional experience.

Level 3 = 3 – 5 years professional experience.

Level 4 = 5 – 8 years professional experience.

Level 5 = More than 8 years professional

System Support Specialist

Technical Analyst

Position Description

Installs, maintains and repairs voice, data and video communications systems. Troubleshoots and resolves problems, or refers to outside service personnel. Provides training and technical assistance to users. Monitors network to ensure its availability to all users. Observes and controls the status and performance of all components of network facilities. Identifies, diagnoses, and resolves problems affecting performance, and monitors network resources.

Essential Position Functions

Principal Duties & Responsibilities

1. Generates, tunes, configures, and upgrades the operating system.
2. Evaluates system performance and reports to management.
3. Assists in system disaster recovery assistance.
4. Defines development tools and procedures for daily operational support.
5. Supports application activities that require specialized system programming.
6. Assists with software product evaluation, including installation, testing, and technical support for the applications programming and/or the computer operations staff.
7. Performs at or above the enterprise's Information Technology performance standards.
8. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Assist in all aspects of system generation including tuning and upgrades.
- Assist in monitoring and reporting system performance.
- Develop and maintain system problem analysis and resolution techniques.
- Analyze and resolve system problems quickly and efficiently.
- Support applications and operations with technical consultation and specialized programming.
- Evaluate the hardware and software vendor and third party hardware and software and reporting significant findings to the Senior Technical Specialist.

Position Requirements

- BS or BA degree in computer science or related field
- 5 years of programming experience, three in system programming
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from different disciplines with varying degrees of technical experience

Career Ladder

The career track for this position is continued technical leadership within technical support and IS. A specific technical position above this one would be Senior Technical Specialist.

Technical Analyst

Technical Services Specialist

Position Description

The Technical Services Specialist is responsible for all aspects of data communications within the enterprise including terminals, local area networks, and communications with remote installations, modern communications, and network security. The technical services specialist must be familiar with LAN topology and software including ETHERNET, MSAU, servers, LAN bridges and gateways.

Essential Position Functions

Principal Duties & Responsibilities

1. Designs and manages the enterprise network including wide area and local area networks.
2. Monitors and tunes the enterprise network for optimal performance.
3. Establishes a growth plan for the network to insure the best quality service in a state-of-the-art environment.
4. Provides planning and technical support for enterprise installations both in central and in the remote facilities.
5. Provides network support for operations and the computing environment of technical support.
6. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
7. Presents at local and national user groups.
8. Publishes articles describing both activities and assessments of technology.
9. Participates with vendors in the assessment of advanced transaction processing and database productions including beta and field test participation.
10. Performs at or above the enterprise's Information Technology performance standards.
11. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Direct the activities of the Network Technicians.
- Manage the day to day repair, monitoring and installation of the network.
- Schedule and prioritize network activities.
- Evaluate vendors for both voice and data communications.
- Design the enterprise's network and integrating it with other enterprise activities.
- Develop and document network related policies and procedures, including network security.

Position Requirements

- BS or BA degree in computer science, business administration or related work experience
- 5 years experience with wide and local area networks including experience with common-carrier data networks and the Internet
- Knowledge at the expert level of networks, wiring and cabling, and network management

Career Ladder

As the enterprise network continues to grow, the Network Specialist will have the opportunity to expand into a more advanced technical position or a project manager position within Information Technology such as Network Project Manager.

Technical Services Specialist

Technical Support Analyst

Position Description

Analyzes and evaluates information systems operations and provides technical direction and recommendations to improve utilization. Reviews records and reports of production, machine malfunctions and maintenance as well as organizational, procedural, and workflow plans and methods.

Essential Position Functions

Principal Duties & Responsibilities

1. Develops and maintains a change system and procedures for the movement of test systems into production.
 2. Develops, maintains and coordinates a change control program covering all production computer operations including policies, procedures and tracking/auditing systems to govern the movement of new/upgraded load modules from the test to the production environment including producing documentation and reports for management regarding change control activities.
 3. Develops and maintains forms involving change control procedures.
 4. Publishes a schedule of planned changes to be turned over to production, and maintains detailed records of the movement of all new/updated load modules.
 5. Screens database administration requests for successful testing and security risks.
 6. Maintains the integrity of all CMS (code management system) libraries. This involves development and maintenance of a system of organization for these libraries.
 7. Insures that all milestones (as described in IT standards manual¹) of a project's life cycle have been met and signed off by the appropriate user.
 8. Insures that all IT standards are met prior to moving proposed projects into production.
 9. Submits updates to the IT standards manual and briefs other IT personnel on the importance and impact of maintaining stringent controls.
 10. Plans and chairs quality review board meetings.
 11. Monitors all changes - one-time and permanent - submitted to the computer batch operations schedule.
 12. Monitors all changes applied to system software and database software submitted by the technical support group.
 13. Recognizes and identifies potential areas where existing policies and procedures require change or where new ones need to be developed, especially regarding future business expansion.
 14. Strives to learn the job functions of the position's immediate superior as well as peer level positions with which the individual interacts. It is the responsibility of the individual to be prepared for temporary re-assignment and/or promotion due to extended illness, personal emergency or business necessity.
 15. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
 16. Develops and maintains service level agreements with the various user departments and enterprise business units.
 17. Performs at or above the enterprise's Information Technology performance standards.
-

Authority

- Develop and control change control procedures.
- Monitor and maintain CMS libraries.

Position Requirements

- BS or BA in computer science or business is desired
- College course work in progress towards a BS or BA degree is also acceptable but not recommended.
- Understanding of the build procedures, operating system, database command languages, and the programming languages and tools used by the enterprise
- Understanding of a project's life cycle, good writing skills, good verbal communication skills, and the ability to perform detail oriented work.

Career Ladder

The Change Control Analyst could progress to the following positions within the enterprise: Project Manager or Senior Systems Analyst in applications or Junior Systems Programmer in technical support.

Technical Support Analyst

Telecommunication Services Director

Position Description

The Telecommunications Services Director is responsible for the overall direction of the design, installation and maintenance of voice, data and video communications including wide area networks, peer-to-peer communications, network security for data, voice and video communications including satellite, microwave, T1 and ISDN. Duties include keeping all voice, data, and image communications systems operational and reliable, maintaining quick and accurate problem response, and maintaining a highly competent and technical support staff.

Essential Position Functions

Principal Duties & Responsibilities

1. Coordinates and establishes priorities of the communications unit on the design, installation, maintenance of all data, voice and video communications networks.
2. Provides technical leadership in all aspects of data, voice and video communications, such as the integration of voice and data, distributed processing, standards such as ISDN, ATM, T1s, T3s, carrier tariffs and regulations, and communication switching equipment.
3. Coordinates with suppliers and other groups in designing, planning, installing, reconfiguring and upgrading enterprise telecommunications equipment and facilities.
4. Provides weekly and monthly reports on network performance as well as forecasts of future utilization and equipment/line requirements.
5. Determines the most cost effective data, voice and video communications for the enterprise and administers the budget for data communications and terminal equipment.
6. Identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
7. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
8. Performs at or above the enterprise's Information Technology performance standards.
9. Conducts presentations at local and national user groups.
10. Participates with vendors in the assessment of advanced transaction processing and transmissions technologies.
11. Defines the strategy for linkage of Internet and other non-enterprise exclusive "Information Highway" networks to the enterprise's network.

Authority

- Oversee the activities of the telecommunications group, including scheduling and prioritizing network activities.
- Manage the personnel of the telecommunications group.
- Coordinate the activities of the group with other IT and enterprise groups.
- Represent the enterprise when working with vendors and carriers on network issues.
- Provide technical communications leadership to IT and the enterprise.

Position Requirements

- BS or BA degree in computer science or related engineering field
- 8 years experience with wide and local area networks including experience with common-carrier data networks
- Knowledge at the expert level of data communications, including protocols, tariffs, monitoring and network forecasting techniques
- Knowledge at the expert level of current techniques and hardware capabilities of a large scale database and data communications environment
- Supervisory experience and ability to plan and control projects
- Ability to understand and clearly relate technical manuals, software specifications, hardware principals of operations, and general methods of systems software operations to other members of the organization

Career Ladder

The logical career progression for the Telecommunication Services Director would be to become the Chief Information Officer. Lateral movement in the non-technical director level or an Information Systems Director is also a possibility.

Telecommunication Services Director

Telecommunications Technician

Position Purpose

The Telecommunications Technician is responsible for the installation, problem diagnosis, repair and maintenance of a full range of telecommunications equipment encompassing both analog and digital technologies. The technician addresses issues of availability and reliability for voice, data, signal, and image processing connectivity within the local and remote IS customer sites to support enterprise growth and the development of new business opportunities.

Essential Position Functions

Principal Duties & Responsibilities

1. Diagnoses and repairs equipment as assigned from system level to bench or component replacement.
2. Responds to job assignments such as work orders, engineering changes, and trouble calls as required.
3. Performs installation and testing of new products individually or as part of a team.
4. Analyzes component requirements of new and upgraded systems.
5. Develops documentation to support current and to test planned equipment configurations.
6. Provides on-the-job training to user or other technical personnel.
7. Insures adherence to and documentation of routine maintenance schedules.
8. Provides planning and technical support for enterprise installations as required.
9. Performs at or above the enterprise's IS performance standards.

Authority

- Inform management of potential service level problems before they occur and communicate solutions.
- Direct self and the activity of others during the repair and testing of the hardware as required.
- Schedule and prioritize work to accommodate IS and customer needs while minimizing impact on current operations.
- Evaluate and recommend vendor products and services.
- Coordinate and oversee vendor maintenance personnel.
- Coordinate and oversee vendor installations.

Position Requirements

- High school diploma and 2 years of college or technical school equivalent in electronics, computer repair, engineering or related fields
- 2 - 3 years experience in electronics or related fields with diagnosis and repair
- Certification in one or more systems or technologies may be required as necessary
- Ability to communicate effectively dealing with internal and external customers and suppliers
- Prior experience with large to very large enterprise environments that include multiple site locations

Career Ladder

This position could lead to senior level telecommunications technician or management positions within operations, or technical support.

Telecommunications Technician

Training Coordinator

Position Description

Coordinates all the training activities for the organization. Ensures the administration, development and execution of training and educational programs in information technology specialties. Responsible for the Training database. Submits summary reports to Management. Conducts training needs assessment and provides recommendations to Management. May supervise and train training specialists and provide ongoing staff training.

Essential Position Functions

Principal Duties & Responsibilities

1. Coordinates and completes all activities required to successfully schedule training requests received from staff.
2. Maintains the organization's Training database.
3. Prescreens external training services and facilities to determine the most cost efficient external training alternative.
4. Schedules external training for operations personnel in a manner which will not decrease enterprise operational capacity.
5. Keep records on completion of both internal and external training sessions including course material, difficulty level, and duration. This information may be used by managers to assist in determining employee performance, motivation and promotion levels.
6. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
7. Strives to learn the job functions of the peer level positions with whom the individual interacts. It is the responsibility of the individual to be prepared for temporary re-assignment and/or promotion due to extended illness, personal emergency or business necessity.
8. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation or education.
9. Performs at or above the enterprise's Information Technology performance standards.

Authority

- Schedule external training sessions for operations personnel.
- Determine external training sites to be used.
- Keep records on training advancement and costs.
- Maintains the Training database and associated reports

Position Requirements

- High school diploma or equivalent is required
- BS or BA degree in computer science, business administration, or related field is preferred
- 2 - 4 years as an instructor or training coordinator

Training Coordinator

Unix Administrator

Position Description

Installs and maintains UNIX operating system and related software to ensure stable performance. Evaluates system specifications, input/output processes, and working parameters for hardware/software compatibility. Troubleshoots networking and operating system problems. Must be familiar with shell and kernel-level programming.

UNIX Administrator

Voice Communications Coordinator

Position Purpose

The Voice Communications Coordinator is responsible for all non-enterprise voice communications within the enterprise including enterprise and warehouse voice communications incorporating vendor offerings (i.e., Sprint, Centrix, etc.), voice mail and voice communications systems.

Essential Position Functions

Principal Duties & Responsibilities

1. Installs new voice communications systems including phones, wiring and programming.
2. Upgrades existing voice communications systems whenever necessary.
3. Evaluates new voice communications technology and makes recommendations to the Manager Network Services.
4. Performs informal training in voice communications equipment usage when necessary.

Authority

- Evaluate new voice communications technology options and reports to the Manager Network Services.
- Program new voice communications equipment.

Position Requirements

- High school diploma required
- BS or BA degree in computer science or related technical field preferred, or a corresponding number of years experience in data processing
- 2 - 4 years experience with voice communication equipment is also required

Career Ladder

The logical career ladder for the Voice Communications Coordinator would be into the Project Manager Network Technical Services position.

Voice Communications Coordinator

Voice Communications Manager

Position Purpose

The Voice Communications Manager is responsible for overseeing all aspects of voice communications within the enterprise including coordinating with the data communications group and managing the voice communications group within technical support.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages and directs the voice communications group in the enterprise including setting priorities, coordination and reporting of voice communication group activities.
2. Provides senior technical leadership for the enterprise including all aspects of voice communications, including the integration of voice and data. How these technologies can benefit the enterprise will be a primary concern of the manager.
3. Serves as a source of documentation and standards for other departments.
4. Works closely with other groups to coordinate plans and activities including coordination with the data communications group regarding new installations and assistance when existing enterprise installations move or are re-configured.
5. Coordinates changes in voice communication requirements caused by changes in the business needs of the enterprise.
6. Tracks voice communication equipment performance daily as well as prepares forecasts of future utilization and equipment requirements including generating and monitoring billing information in a timely and efficient manner.
7. Tracks voice communication employee performance daily as well as prepares forecasts of future utilization and employee requirements.
8. Assists in the determination of the most cost effective voice communications for the enterprise and administering the budget for voice communications and related equipment.
9. Performs capacity reviews and plans for voice communications equipment and functions, as well as analyzing vendor proposals.
10. Maintains current knowledge of overall voice communication vendor capabilities.
11. Consults with and advises other department managers and/or directors within the enterprise in the use of voice communications equipment .
12. Serves as a focal point for management inquiries regarding voice communications equipment use and capabilities.
13. Initiates and directs special projects as required to assess and implement voice communication innovations to assure that the enterprise is utilizing the best of current voice communications technology.
14. Serves as representative of the enterprise to outside voice communications associations; interacts with special interest groups and governmental agencies dealing with voice communications matters.
15. Presents at local and national user groups.
16. Publishes articles describing both the enterprise's activities and assessments of technology.
17. Participates with vendors in the assessment of advanced transaction processing and database productions including beta and field test participation.
18. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.

19. Performs at or above the enterprise's Information System performance standards.
20. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Oversee the activities of the voice communication group, including scheduling and prioritizing voice communication activities.
- Interact with the personnel of the voice and data communication groups.
- Coordinate the activities of the voice communications group with other IS and the enterprise groups.
- Represent the enterprise when working with vendors on voice communication issues.
- Provide technical voice communications leadership to IS and the enterprise.

Position Requirements

- BS or BA degree in computer science, business administration, communications or related field
- 5 years experience with voice communication equipment, preferably in a PBX environment
- 3 years of management experience in the communications area
- Knowledge of voice communications, including tariffs, monitoring and forecasting techniques
- Ability to express complex technical concepts effectively, both verbally and in writing
- Ability to work well with people from many different disciplines with varying degrees of technical experience

Career Ladder

This position could lead to management positions within applications, technical support, or operations.

Voice Communications Manager

Voice Communications Specialist

Position Purpose

The Voice Communications Specialist is responsible for overseeing voice communications within technical support. This group is responsible for all aspects of voice communications within the enterprise including coordinating with data communications.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages and directs voice communications at the enterprise including setting priorities, coordinating and reporting of voice communication activities.
2. Provides senior technical leadership for the enterprise including all aspects of voice communications, including the integration of voice and data. How these technologies can benefit the enterprise will be a primary concern of the specialist.
3. Serves as a source of documentation and standards for other the enterprise departments.
4. Works closely with other groups to coordinate plans and activities including coordination with the data communications group regarding new installations and assistance when existing installations move or are re-configured.
5. Coordinates changes in voice communication requirements caused by changes in the business needs of the enterprise.
6. Tracks voice communication equipment performance daily as well as prepares forecasts of future utilization and equipment requirements including generating and monitoring billing information in a timely and efficient manner.
7. Assists in determining the most cost effective voice communications for the enterprise.
8. Administers the budget for voice communications and related equipment.
9. Performs capacity reviews and plans for voice communications equipment and functions.
10. Analyzes vendor proposals.
11. Maintains current knowledge of overall voice communication vendor capabilities.
12. Advises other departments within the enterprise in the use of voice communications equipment.
13. Serves as a focal point for user inquires regarding voice communications equipment use and capabilities.
14. Initiates and directs special projects as required to assess and implement voice communication innovations to assure that the enterprise is utilizing the best of current voice communications technology.
15. Serves as representative of the enterprise to outside voice communications associations.
16. Interacts with special interest groups and governmental agencies dealing with voice communications matters.
17. Presents at local and national user groups.
18. Publishes articles describing both the enterprise's activities and assessments of technology.
19. Participates with vendors in the assessment of advanced transaction processing and database productions including beta and field test participation.

20. Develops and reviews technical service level standards for voice communication equipment; monitoring and reporting activity levels on voice communication systems.
21. Recognizes and identifies potential areas where existing policies and procedures require change, or where new ones need to be developed, especially regarding future business expansion.
22. Performs at or above the enterprise's Information Technology performance standards.
23. Fulfills departmental requirements in terms of providing work coverage and administrative notification during periods of personnel illness, vacation, or education.

Authority

- Oversee the activities of the voice communication area, including scheduling and prioritizing voice communication activities.
- Interact with the personnel of the voice and data communication groups.
- Coordinate the activities of the voice communications area with other IT and enterprise groups.
- Represent the enterprise when working with vendors on voice communication issues.
- Provide technical voice communications leadership to IT and the enterprise.

Position Requirements

- High school diploma required
- BS or BA degree in computer science or related technical field preferred, or a corresponding number of year's experience in IT.
- 5 years experience with voice communication equipment, preferably in an environment like the enterprise's
- Knowledge at the expert level of voice communications, including tariffs, monitoring and forecasting techniques

Career Ladder

This position could lead to technical or project management positions within applications, technical support, or operations. A specific technical position above this one has not yet been defined. A possible management position above this position would be Voice Communications Project Manager.

Voice Communications Specialist

Web Administrator

Positions Description

Utilizing knowledge of operating systems such as UNIX , Windows NT, TCP/IP, Internet services such as HTTP and FTP servers and focusing primarily on files within the server root, performs the ongoing day –to-day operation of the server software including maintaining system security, monitoring usage statistics and the logs, modifying configuration settings and backing up the system. Troubleshoots system related problems as needed. May write shell scripts.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages the installation, configuration and maintenance of Internet and Intranet servers to ensure proper transmission of documents and files over current protocols.
2. Defines and manages the setting of standards for the enterprise. May need to evaluate competing hardware and software to make determination of needs within the enterprise.
3. Defines and sets network security layers ("firewalls") so as to deter unauthorized access to proprietary data.
4. Manages the implementation and operation of all Internet and Intranet security with password and digital encryption information for secured documents.
5. Manages public/private key certificates for secure HTTP transactions.
6. Researches and implements security policies.
7. Ensures the definition of the look and feel of the enterprise sites is consistent with the enterprise.
8. Specifies standards for enterprise-wide (intranet) Web documents, ensures that all submitted documents meet those standards, and converts all other submitted materials to Web documents.
9. Manages the enterprises data exchange and integrates multimedia assets and database applications.
10. Coordinates overall site design implementation with creative staff, to match desired outcome with technological feasibility.
11. Generates timely reports as required.
12. Secures web site design , programming, graphics word-processing and authoring support as needed.
13. Manages the programming of Internet and Intranet applications in all common Web HTML formatting tools such as animated GIF and Java. This includes Web page-to-data access routines using Common Gateway Interface. Coordinates scripting and programming with other IT and web authors.
14. Integrates new technologies (add-ins and plug-ins) into the Internet and Intranet environment.
15. Maintains cross-platform and cross-browser compatibility.
16. Identifies necessary training and education requirements.
17. Researches new Web features and tools which might be useful for authoring documents, for managing the Web site, and for expanding on-line offerings. Usually has background in Computer Science or similar experience.
18. Mediates between the business needs, content authors and system administrator, ensuring adherence to applicable Web language coding standards and currency of Web links.

19. Optimizes Web architecture for navigability by taking editorial ownership of the content, quality and style of the site. Consults with graphic artists as required.
20. Provides first level help desk support on Web issues.
21. Defines the standards for a consistent visual image through uniform fonts, formatting, icons, images and layout techniques.
22. Defines appropriate resolutions, sizes, color maps and depths to ensure that images are delivered at sufficiently high speed and quality for intended output media.
23. See that all personnel are trained in use and applications associated with the Intranet, Web pages, uploading of data; file transfer; image acquisition using optical scanners and imaging tools.
24. Approves all final submissions for visual congruity and proper coding in common Web language.

Authority

- Depending on the maturity of the position (see Position Purpose above), a Manager Internet - Intranet Activities should have the authority to direct overall content of the Web site, at least in matters of style, wording and overall look and feel. The Manager Internet - Intranet Activities is a direct report to a member of senior management; he or she will often "inherit" certain measures of authority from that manager in all ways excepting the setting of policy.

Position Requirements

- High school diploma required
- BS or BA degree in computer science, graphic design or related work experience desirable
- Ability to work within a variety of Web-based hardware environments, and to manage the Web site from a client as well as a server perspective
- Ability to produce Web pages that are aesthetically pleasing within the limitations of the delivery medium
- Experience with server platforms and Web server software, networking, and security architecture and implementation
- Familiarity with standard Internet protocols and other Internet issues such as name servers, hypertext transfer, file transfer, e-mail, Usenet, etc.
- Familiarity with common Web languages and extensions as required, e.g. tables, frames, server-push/client-pull, server-side includes, etc., as well as awareness of browser compatibility issues
- Familiarity with both Internet and Intranet connectivity protocols and software
- Working knowledge of graphics applications allowing full manipulation of files
- Experience with database design and implementation utilizing databases
- Familiarity with Internet connectivity hardware (modems, data service units/channel service units, routers, terminal servers)
- Experience with Web Server-to-email interfaces
- Should be familiar with Common Gateway Interface and Java language programming, as well as animated GIF creation
- Ability to program forms and implement scripts
- Ability to interact positively and effectively with employees at all levels within the organization, as well as with customers, prospects, and vendors
- Demonstrate project management skills
- Excellent oral and writing skills

Career Ladder

Position will stabilize as a medium to high ranking staff position, with a path to a management position such as Manager Network Services.

Web Administrator

Web Author

Position Description

Employing such languages as HTML (Hyper Text Mark-Up Language) and focusing primarily on files within the document root, creates and develops visually aesthetic graphics and writes text about the organization and web site, catalogs, short stories and customer support documents for inclusion in the site itself. May create links to other web sites. Please Note: The Web Author function within each site may be allocated between more than one incumbent with each having exclusive responsibility for the contents of a different part of the directory tree.

Position Requirements

- BS or BA degree in computer science, graphic design or related work experience
- Experience with HTML Authoring
- Basic knowledge of web/internet technologies such as email, FTP,
- Marketing and sales knowledge a plus

Web Developer

Position Purpose

The Web Developer is responsible for the development, maintenance and support of web-based applications for the enterprises web site. He or she utilizes a plan and implements the content of a WorldWide Web site. Responsible for the creation of unique content and the integration of approved content from other sources within the enterprise. Responsible for developing and implementing overall look and feel, graphics and multimedia components, as well as conceptualizing navigation structure and content flow.

Essential Position Functions

Principle Duties & Responsibilities

1. Develop web applications using the enterprise's standard web-application development tools.
2. Under supervision of the Webmaster establishes and maintains appropriate directory trees on the Web server hardware, permitting organization of Web site. May also install and configure Web server software. May need to evaluate competing hardware and software to make determination of needs with the enterprise.
3. Implements a security directory with password and digital encryption information for secured documents.
4. Obtains and manages public/private key certificates for secure HTTP transactions.
5. Researches and either establish or implement security policies under the supervision of the Webmaster.
6. Specifies display standards for enterprise-wide (Intranet and Intranet) Web documents, ensures that all submitted documents meet those standards, and converts all other submitted materials to Web documents. If Web site is primarily external and public, determines which standards will provide for uniformity across various generations of browsers on a variety of computing platforms.
7. Uploads pages onto the site, and integrates multimedia assets and database applications.
8. Coordinates overall site design implementation with creative staff, to match desired outcome with technological feasibility.
9. Generates timely reports as required. Provides programming, graphics word-processing and authoring support of the Webmaster.
10. Programs in all common Web HTML formatting tools such as animated GIF, Java, and ActiveX.
11. Programs Web page-to-data access routines using Common Gateway Interface, and Active Server Pages.
12. Coordinates scripting and programming with the Webmaster and other Web authors.
13. Integrates new technologies (add-ins and plug-ins) into the Web environment.
14. Maintains cross-platform and cross-browser compatibility.
15. Researches new Web features and tools which might be useful for authoring documents, for managing the Web site, and for expanding on-line offerings.
16. Works with content authors and Webmaster / system administrator, ensuring adherence to applicable Web language coding standards and currency of Web links.
17. Optimizes Web architecture for navigability by taking editorial ownership of the content, quality and style of the site.
18. Consults with graphic artists as required.
19. Presents a consistent visual image through uniform fonts, formatting, icons, images, and layout techniques. Knowledge of PhotoShop or similar image manipulation tools.

20. Determines appropriate compression resolutions, sizes, color maps, and depths to ensure that images are delivered at sufficiently high speed and quality for intended output media.
21. Advises personnel in construction of Web pages and proper uploading of pages; file transfer and use of Web applications; image acquisition using optical scanners and imaging tools.
22. Edits all final submissions for visual congruity and proper coding in common Web language.

Position Requirements

- High school diploma required
- BS or BA degree in computer science, graphic design or related work experience desirable
- Ability to work within a variety of Web-based hardware environments
- Ability to produce Web pages that are aesthetically pleasing within the limitations of the delivery medium
- Experience with server platforms and Web server software, and security architecture and implementation
- Familiarity with common Web languages and extensions as required, e.g. tables, frames, server-push/client-pull, server-side includes, etc., as well as awareness of browser compatibility issues
- Familiarity with both Internet and Intranet connectivity
- Working knowledge of graphics applications allowing full manipulation of files
- Experience with database design and implementation utilizing databases desirable
- Should be familiar with Common Gateway Interface and Java language programming, as well as animated GIF creation
- Ability to program forms and implement scripts
- Ability to interact positively and effectively with employees at all levels within the organization, as well as with customers, prospects, and vendors
- Demonstrates project management skills
- Excellent oral and writing skills
- Knowledge and experience working with relational database tables and procedures.
- Knowledge of Client/Server application development practices and procedures

Web Developer

Web Site Manager - Department

Position Description

Manages the organizations Web Sites including technical programming and database development, design (site content, aesthetic look and feel) as well as the site's day-to-day operations. Must manage the activities of one or more web site dedicated jobs such as Web Developer, Web Author, Web Administrator and/or Webmaster.

Essential Position Functions

Principal Duties & Responsibilities

1. Manages the installation, configuration and maintenance of Internet and Intranet servers to ensure proper transmission of documents and files over current protocols.
2. Manages the implementation and operation of all Internet and Intranet security with password and digital encryption information for secured documents.
3. Manages public/private key certificates for secure HTTP transactions.
4. Researches and implements security policies.
5. Coordinates overall site design implementation with creative staff, to match desired outcome with technological feasibility.
6. Generates timely reports as required.
7. Secures web site design, programming, graphics word-processing and authoring support as needed.
8. Manages the programming of Internet and Intranet applications in all common Web HTML formatting tools such as animated GIF and Java. This includes Web page-to-data access routines using Common Gateway Interface.
9. Integrates new technologies (add-ins and plug-ins) into the Internet and Intranet environment.
10. Maintains cross-platform and cross-browser compatibility.
11. Identifies necessary training and education requirements.
12. Researches new Web features and tools which might be useful for authoring documents, for managing the Web site, and for expanding on-line offerings. Usually has background in Computer Science or similar experience.
13. Mediates between the business needs, content authors and system administrator, ensuring adherence to applicable Web language coding standards and currency of Web links.
14. Optimizes Web architecture for navigability by taking editorial ownership of the content, quality and style of the site. Consults with graphic artists as required.
15. Provides first level help desk support on Web issues.
16. Defines the standards for a consistent visual image through uniform fonts, formatting, icons, images and layout techniques.
17. Defines appropriate resolutions, sizes, color maps and depths to ensure that images are delivered at sufficiently high speed and quality for intended output media.
18. See that all personnel are trained in use and applications associated with the Intranet, Web pages, uploading of data; file transfer; image acquisition using optical scanners and imaging tools.
19. Approves all final submissions for visual congruity and proper coding in common Web language.

Authority

- Depending on the maturity of the position (see Position Purpose above), a Manager Internet - Intranet Activities should have the authority to direct overall content of the Web site, at least in matters of style, wording and overall look and feel. The Manager Internet - Intranet Activities is a direct report to a member of senior management; he or she will often “inherit” certain measures of authority from that manager in all ways excepting the setting of policy.

Position Requirements

- High school diploma required
- BS or BA degree in computer science, graphic design or related work experience desirable
- Ability to work within a variety of Web-based hardware environments, and to manage the Web site from a client as well as a server perspective
- Ability to produce Web pages that are aesthetically pleasing within the limitations of the delivery medium
- Experience with server platforms and Web server software, networking, and security architecture and implementation
- Familiarity with standard Internet protocols and other Internet issues such as name servers, hypertext transfer, file transfer, e-mail, Usenet, etc.
- Familiarity with common Web languages and extensions as required, e.g. tables, frames, server-push/client-pull, server-side includes, etc., as well as awareness of browser compatibility issues
- Familiarity with both Internet and Intranet connectivity protocols and software
- Working knowledge of graphics applications allowing full manipulation of files
- Experience with database design and implementation utilizing databases
- Familiarity with Internet connectivity hardware (modems, data service units/channel service units, routers, terminal servers)
- Experience with Web Server-to-email interfaces
- Should be familiar with Common Gateway Interface and Java language programming, as well as animated GIF creation
- Ability to program forms and implement scripts
- Ability to interact positively and effectively with employees at all levels within the organization, as well as with customers, prospects, and vendors
- Demonstrate project management skills
- Excellent oral and writing skills

WebMaster

Position Description

Editor of the web site. Responsible for the content and consistent look of the overall site. Oversees technical management of a World-Wide Web site, including integration of approved content, file management and site maintenance, data base management and coordination of the retrieval of pertinent information from the site to end-users, and archiving and record management.

Essential Position Functions

Principle Duties & Responsibilities

1. Installs, configures and maintains Internet and Web servers to ensure proper transmission of documents over current Internet protocols. Establishes and maintains directory trees, permitting organization of Web site. May need to evaluate competing hardware and software to make determination of needs within the enterprise.
2. Determines and sets network security layers ("firewalls") so as to deter unauthorized access to proprietary data.
3. Implements a security directory with password and digital encryption information for secured documents.
4. Obtains and manages public/private key certificates for secure HTTP transactions.
5. Researches and either sets or implements security policies.
6. Specifies display standards for enterprise-wide (intranet) Web documents, ensures that all submitted documents meet those standards, and converts all other submitted materials to Web documents. If Web site is primarily external and public, determines which standards will provide for uniformity across various generations of browsers on a variety of computing platforms.
7. Uploads pages onto the site, and integrates multimedia assets and database applications.
8. Coordinates overall site design implementation with creative staff, to match desired outcome with technological feasibility.
9. Generates timely reports as required.
10. Secures programming, graphics word-processing and authoring support as needed.
11. Programs in all common Web HTML formatting tools such as animated GIF and Java.
12. Programs Web page-to-data access routines using Common Gateway Interface.
13. Coordinates scripting and programming with other IT and web authors.
14. Integrates new technologies (add-ins and plug-ins) into the Web environment.
15. Maintains cross-platform and cross-browser compatibility.
16. Provides ongoing training and education.
17. Researches new Web features and tools which might be useful for authoring documents, for managing the Web site, and for expanding on-line offerings. Usually has background in Computer Science or similar experience.
18. Mediates between content authors and system administrator, ensuring adherence to applicable Web language coding standards and currency of Web links. Optimizes Web architecture for navigability by taking editorial ownership of the content, quality and style of the site.
19. Consults with graphic artists as required.
20. Provides first level help desk support on Web issues.

21. Presents a consistent visual image through uniform fonts, formatting, icons, images, and layout techniques. Knowledge of PhotoShop or similar image manipulation tools.
22. Determines appropriate compression resolutions, sizes, color maps, and depths to ensure that images are delivered at sufficiently high speed and quality for intended output media.
23. Trains personnel in construction of Web pages and proper uploading of pages; file transfer and use of Web applications; image acquisition using optical scanners and imaging tools.
24. Edits all final submissions for visual congruity and proper coding in common Web language.

Authority

- Depending on the maturity of the position, a Webmaster should have the authority to direct overall content of the Web site, at least in matters of style, wording, and overall look and feel. The Webmaster is a direct report to a member of senior management, he or she will often “inherit” certain measures of authority from that manager in all ways excepting the setting of policy.

Position Requirements

- BS or BA degree in computer science, graphic design or related work experience
- Ability to work within a variety of Web-based hardware environments, and to manage the Web site from a client as well as a server perspective
- Ability to produce Web pages that are aesthetically pleasing within the limitations of the delivery medium
- Experience with server platforms and Web server software, networking, and security architecture and implementation
- Familiarity with standard Internet protocols and other Internet issues such as name servers, hypertext transfer, file transfer, e-mail, Usenet, etc.
- Familiarity with common Web languages and extensions as required, e.g. tables, frames, server-push/client pull, server-side includes, etc., as well as awareness of browser compatibility issues
- Familiarity with both Internet and Intranet connectivity protocols and software
- Working knowledge of graphics applications allowing full manipulation of files
- Experience with database design and implementation utilizing databases
- Familiarity with Internet connectivity hardware (modems data service units/channel service units, routers, terminal servers)
- Experience with Web Server-to-email interfaces
- Familiar with Common Gateway Interface and Java language programming, as well as animated GIF creation
- Ability to program forms and implement scripts
- Ability to interact positively and effectively with employees at all levels within the organization as well as with customers, prospects, and vendors
- Ability to program forms and implement scripts
- Demonstrates project management skills
- Excellent oral and writing skills
- Knowledge and experience working with relational database tables and procedures
- Knowledge of Client/Server application development practices and procedures

WebMaster